

THE U.S.S.R

SHOWING ITS 16 CONSTITUENT REPUBLICS, WITHIN THESE ARE MANY AUTONOMOUS REPUBLICS - (YAKUT, BURYAT-MONGOL, BASHKIR, KOKI ETC.) AUTONOMOUS REGIONS (TUVA, GORN-ALTAI, KHAKASS ETC.) & FOR THE LESS DEVELOPED PEOPLES OF THE NORTH, NATIONAL AREAS (EVENKI, NENETZ, OSTYAK, TUGUL, ETC.)



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Man and plan in Soviet economy.



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MAN AND PLAN IN
SOVIET ECONOMY

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MAN AND PLAN IN
SOVIET ECONOMY

by

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PREFACE

THIS book was written when the deeper truths about the Soviet Union, to which the eyes of many millions were opened for a short while during the war against Nazi Germany, were being temporarily obscured again by the passion of controversy about the settlement of Europe after the war.

Experience throughout the thirty years' existence of the Soviet Union, however, suggests that study of the permanent features of the Soviet economy and polity, as they are, is a better guide to Soviet policy, and therefore to European peace and prosperity, than passion or prejudice.

The pages which follow are offered with that in mind.

There is no single thesis which this book attempts to sustain. In the first chapter it dwells on the intimate connection for the U.S.S.R. between planning and foreign policy. In the next four chapters it goes on to show the rôle of the individual in the Soviet economy before and after the second World War. The sixth chapter deals with the immensely important war-time changes in Soviet Central Asia, both economic and social. An Afterword ventures to challenge, in the light of the facts presented earlier, some recent misrepresentations of the Soviet method of planning.

Anyone entering this field of study is bound to be aware of the great expanses already cultivated in it, particularly by Mr. Dobb in his masterly history of Soviet economic development since 1917, by the Webbs in their volumes on Soviet Communism, by Mr. Baykov in his compendium of Soviet economic legislation and statistics, and by Mr. Burns in his study of Russia's productive system.

All these valuable works touch upon some of the questions treated in this book, but perhaps in less detail than the present writer has felt it desirable to devote.

Those who are looking for yet another of the many demonstrations that a Socialist system cannot work, and that the Soviet régime must inevitably collapse, will not find it here. Nor would this book give satisfaction to those (if they existed) who believed the U.S.S.R. to be an earthly paradise.

The revolution of November, 1917, took place in Russia because, among other reasons, it was the "weakest link" among the greater Powers. This meant that when the Soviet people began building a Socialist society they encountered, and are still encountering, many difficulties—both material and in the mind of man—such as are not solved in a hurry.

It is a mistake to think that they can be; but events have shown that it is even more of a mistake, and pregnant with more tragic consequences for the world, to see nothing but difficulties in the U.S.S.R., and to jump to the hasty conclusion that they are insurmountable.

One of the main purposes of this book, in fact, is to show how some of them are being surmounted, in the belief that better understanding of the strength as well as of the difficulties of the Soviet economic system may in the long run serve the interests of the British people.

* * * * *

For the convenience of the reader, most references have been given throughout the book in footnotes, titles of books, pamphlets or journals being given in English or Russian, according to the language in which they are printed. When a work was published in English in the U.S.S.R., this is indicated in the footnote; in other cases it may be assumed to have been published in Great Britain.

My thanks are due to Miss H. M. Weston for her invaluable help in typing a manuscript which called for a critical as well as an accurate eye.

CHAPTER I

PLANNING AMID DIFFICULTIES

Corrigenda

- P. 12. line 24. For "circulation" read "emulation".
 P. 21. line 17. For "1923" read "1929".
 P. 33. bottom line. For "; and 17% in 1948" read "(and were 17% in 1948)".
 P. 34. line 14. For "times" read "tons".
 P. 86. line 4 from bottom. For "expended" read "expanded".

Union began the national planning of its economic life in 1929. That, too, was natural. For such planning implied that a good deal of preliminary foundation work had been successfully carried out, particularly in repairing the immense damage done to the feeble economic organism of Russia by over six years of war from 1914 to 1920, without large-scale assistance from the institutions of capitalist society.

Many writers took their stand firmly upon the proposition that it wasn't true, that Soviet economy didn't work and couldn't plan. Those who are fond of literary curiosities will find an amusing collection of them in Stalin's report of January, 1933, on the results of the first Five Year Plan.¹ How firmly this view was held could be illustrated by the fact that in 1936—*i.e.*, well on into the second Five Year Plan—the University of Manchester

¹ Stalin, *Leninism* (English edition, 1944), pp. 408-9.

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CHAPTER I

PLANNING AMID DIFFICULTIES

1. TWO VIEWS OF SOCIALIST ECONOMY

SOVIET economy has been a subject of controversy among economists of other countries ever since 1917; that was natural, since the Soviet State was based upon the overthrow of private property in the means of production—an institution which is assumed to exist by the majority of theoretical writers on political economy. Controversy reached its most acute stage, however, when the Soviet Union began the national planning of its economic life in 1929. That, too, was natural. For such planning implied that a good deal of preliminary foundation work had been successfully carried out, particularly in repairing the immense damage done to the feeble economic organism of Russia by over six years of war from 1914 to 1920, without large-scale assistance from the institutions of capitalist society.

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¹ Stalin, *Leninism* (English edition, 1944), pp. 408-9.

published a booklet for its department of economics¹ stating boldly that "a system of planned economy has never been attempted in U.S.S.R. since the repeal of Communism in 1921". The most distinguished upholder of this view, however, was Lord Keynes. As long ago as 1925, when the Soviet Government published its *Control Figures of National Economy*—the first tentative approach to the later Five Year Plan—he was writing, in his *Short View of Russia*: "On the economic side, I cannot perceive that Russian Communism has made any contribution to our economic problems of intellectual interest or scientific value". In 1934, he added sarcastically that the subtle, almost irresistible attraction of Communism was "as a means of making the economic situation worse".²

The majority of economic writers, at any rate after the beginning of the second Five Year Plan in 1933, were less adamant: planning in the U.S.S.R. may work, they said, but that is because the individual there has lost all economic freedom. The State decides what he is to buy and what he is to work at. There is no scope left for personal choice. Planning leads to autocracy, declared the U.S. National Association of Manufacturers in its *Platform for American Industry* (December, 1935): "Private ownership and control of the facilities of production, distribution and living are recognised as essential to the preservation of individual liberty and progress". Not all academic economists were as frank as this, but substantially their attitude was the same. "So far as the trade unions are concerned, the fiat of the employer is more absolute in Russia than in any capitalist country," wrote Mr. Geoffrey Crowther (editor of *The Economist*), in his *Economics for Democrats* (1939). Soviet economy

¹ M. Polanyi, *U.S.S.R. Economics*, p. 15.

² *Stalin-Wells Talk*, p. 35.

was "totalitarian": it implied "the worst oppression committed in the name of Socialism": the individual in Soviet economy becomes "a mere means, to be used by authority" in the service of abstractions like "social welfare" or "the good of the community", explained Professor Hayek, in his *Road to Serfdom* (1944). For the achievement of their economic ends, the Soviet leaders used their powers "against the natural opposition of individuals", said Sir William Beveridge in *Full Employment in a Free Society* (1944).

Much more could be quoted in the same sense, from these and other eminent economists. Suppression of initiative and individual enterprise, bureaucratic tyranny, regimentation, enslavement of the individual, soulless control by the State, man a mere cog in a huge impersonal machine—such were the typical verdicts passed upon the economic planning of the U.S.S.R. by its critics.

On the other hand, the Marxist theory, in which the leaders of the Russian revolution were steeped, and by which they were guided in their organisation of Soviet economy, had always assumed both that State planning was essential in a Socialist society and that it involved greater, not less, participation of the individual in the regulation of economic affairs than under capitalism.

Even before Marx and Engels worked out their fundamental ideas in the form of the *Communist Manifesto* of 1848, a number of their British and French Utopian fore-runners, to whom they paid such a warm tribute in its pages, had also assumed that planning in the ideal society would be combined with greater individual freedom for the producer. Robert Owen founded the productive activities of his "villages of unity and co-operation" upon this idea. Charles Fourier, who advocated the formation of an "areopagus", or representative planning com-

mittee, in each of the ideal "phalansteries" of 1800 to 2000 people of future communist society, nevertheless gave it only advisory functions, and the members were to be free to decide their occupations for themselves. John Francis Bray, in *Labour's Wrongs and Labour's Remedy* (1839), considered it possible, and even essential, in his anticipation of communist society founded upon joint stock, both to have general and local boards of trade, by which "all matters connected with production and distribution could in a short time be as easily determined for a nation as for an individual company under the present arrangement", and to allow each individual "liberty to accumulate as much as he pleases, and to enjoy such accumulations when and where he might think proper". Louis Blanc,¹ in his advocacy of a collectivist society founded upon "social workshops" and State planning, looked forward to a condition in which "emulation is not destroyed, it is purified . . . we do not claim in the least to sacrifice human personality, the rights of the individual, to the emancipation of the people". Etienne Cabet saw the future Republic, through its national assembly, planning manufactures, distribution of labour, capital construction, promoting new inventions, training workers and so forth. At the same time, he wrote, "to excite a useful circulation, every worker who through patriotism does more than his duty, or who in his profession makes a useful discovery, obtains particular esteem, or public distinction, or even national honours".²

Marx and Engels themselves, in the programme of immediate measures for a ruling working class, worked out in the *Communist Manifesto*—but many of them widely advocated in the democratic and Socialist movements of

¹ See the 1848 edition of his *Organisation du Travail* (1839).

² *Voyage en Icarie* (1848 edition, pp. 100, 102).

the years before 1848—made measures of planning play an outstanding part. Centralisation of credit in the hands of the State by means of a national bank, State ownership of transport and communications, equal obligation of all to work, extension of factories owned by the State, expansion of agriculture "in accordance with a common plan", are all among the "pretty generally applicable" measures of the *Communist Manifesto*. Yet at the same time the *Manifesto* looked forward to the establishment by these means of "a vast association of the whole nation . . . in which the free development of each is the condition for the free development of all".

Again, in his *Civil War in France* (1871), Marx drew particular attention to the decree of the Paris Commune (16th April, 1871) under which co-operative societies of workers were to take over closed factories, and were later to be organised in one great union, in order "to regulate national production upon a common plan", thus "putting an end to the constant anarchy and periodical convulsions which are the fatality of capitalist production". Marx said this kind of *co-operative*—i.e., voluntary—activity was nothing else but a practical step to communism; and Engels, in his introduction of 1891, called it "by far the most important decree of the Commune".

Already in his *Anti-Dühring* (1878) Engels had foreseen that the ending of the capitalist system by the workers would mean "the replacement of the anarchy of social production by a socially planned regulation of production, in accordance with the needs both of society as a whole and of each individual". Yet such planned production would not merely not prevent, on the contrary it would *guarantee* to all members of society, "the completely unrestricted development and exercise of their physical and mental faculties". At this point, in fact, men would

be entering "conditions which are really human" for the first time. It would be "humanity's leap from the realm of necessity into the realm of freedom".¹

Even more explicit was the combination of planning with industrial democracy in the sketch of Socialist society, *The Day After the Revolution*, made by Karl Kautsky, the most authoritative exponent of Marxist ideas during the first years of international Socialism after the death of Engels. In this lecture² delivered in 1902, Kautsky on the one hand saw the future Socialist State accomplishing "the systematic regulation and circulation of products, the exchange between industry and industry, between producers and consumers": with labour power "assigned to the individual branches of production according to a definite plan". On the other hand, he pointed out that "a Socialist régime would from the beginning seek to organise production democratically", and that the discipline of the ruling working class would be like that of its trade unions—"democratic discipline, a voluntary submission to leadership chosen by themselves, and to the decisions of the majority of their own comrades. . . . A democratic factory will take the place of the present aristocratic one."

How far has planned Soviet economy conformed to these standards? Does its régime, in fact, resemble the picture drawn by the quoted economists, or that drawn by the writers at whose feet the Russian Marxists—including the leaders of the Soviet State—studied in their early years? The main purpose of this book is to investigate the facts of Soviet economic development, and particularly of recent Soviet planning, with this question in mind.

¹ English edition, 1935, pp. 314, 317-18.

² English translation (defective) *The Social Revolution* (C. H. Kerr, 1902), pp. 126, 130, 149.

Before proceeding with that purpose, however, it is desirable to notice a criticism of Soviet planning from another angle—criticism which is important because it made its appearance for the first time, in any quarter commanding attention, after the Second World War.

On 9th May, 1945, Stalin declared in his victory address to the Soviet people: "The period of war in Europe is over. The period of peaceful development has begun." Ten months later the promise had borne fruit in a characteristic Soviet form, in the shape of the Five Year Plan for the years 1946-50, adopted by the Supreme Soviet of the U.S.S.R. at its first post-war session:

"Having effectively initiated, while the Patriotic War was still on, the economic rehabilitation of the formerly occupied regions, the Soviet Union, now that the war is over, is continuing to rehabilitate and further develop its national economy on the basis of long-range State plans, which determine and direct the economic life of the U.S.S.R.

"The Supreme Soviet of the U.S.S.R. declares that the principal aims of the Five Year Plan for the rehabilitation and development of the national economy of the U.S.S.R. in 1946-50 are to rehabilitate the devastated regions of the country, to recover the pre-war level in industry and agriculture, and then considerably to surpass that level."¹

The interpretation put upon the new Five Year Plan by many influential writers in Britain and America, however, was very different from its declared purpose. They proclaimed that "Russia has chosen guns instead of butter"; and this assertion played its part in creating distrust of the U.S.S.R. in the post-war years, reinforcing the other criticisms already mentioned. It is therefore of some importance to try to establish whether the main

¹ *Law on the Five Year Plan* (Soviet News, 1946), p. 9.

features of the fourth Five Year Plan—which its foreign critics, as a rule, refrained from quoting in detail—do in fact bear out the interpretation they give it. As a preliminary, it will be helpful to examine how far any of the previous Soviet economic plans were compatible with the policy of “guns instead of butter”.

2. EXTERNAL RELATIONS AND PLANS, 1920-32

The first plan of any practical effect in Soviet industry was adopted by the VIII All-Russian Congress of Soviets in December, 1920, at the end of the foreign invasions which made possible the post-revolutionary civil war.¹ The plan was a modest one—little more than a series of co-ordinated targets, affecting about fifteen branches of industry—and it turned on a project for the construction of thirty power-stations distributed among the various

¹ In January, 1920, as will be seen later, Lenin had already raised the question of a national economic plan, and the All-Russian Executive Committee of Soviets in February ordered that such a plan should be drafted, taking as its point of departure a scheme of electrification. In March and April, 1920, the IX Congress of the Russian Communist Party declared that a single economic plan, applied over a period of years, was “the fundamental condition for the economic regeneration of the country”, and that for its success it required “insistent explanation, to the widest masses of town and country, of the inner meaning of the economic plan”. The war with Poland which began in April, 1920, and the campaign against General Wrangel, took up the next seven months; but the work of drafting continued. It is noteworthy that the same Congress declared that a powerful means of increasing productivity of labour was emulation, and continued:

“In capitalist society, emulation bore the character of competition and led to exploitation of man by man. In a society where the means of production have been nationalised, emulation in work does not infringe solidarity but must only increase the total sum of products of labour. Emulation between works, districts, departments, workshops, and individual workmen should become the subject of careful organisation and attentive study by the trade unions and economic bodies.”

economic regions of Soviet Russia. The aim, in the words of Krzhizhanovski, chairman of the State Electrification Commission (GOELRO), who reported to the Congress on the matter, was “approximately in a ten-year period not only to heal the wounds of war, but also to raise our productive forces during the period to 80-100% above the pre-war level”.¹

At that time Russian economy, after more than six years of continuous warfare, was in a state of almost complete breakdown. The gross output of industry in 1920 was less than one-seventh of what it had been in 1913. Pig-iron output was barely 2%, cement 3%, cotton yarn 5%, sugar under 7%, ploughs 13%, railway engines under 15% of the pre-war level. More than half of the existing railway engines and nearly a quarter of the railway goods wagons were out of action. As a result, although coal output was still nearly 16% of the 1916 output and oil output nearly 40%, much of this essential fuel could not be moved. The cultivated area was down to 76% of the 1913 level.²

Krzhizhanovski said:

“It is clear to all that we must strain every effort to put an end in the speediest possible time to our post-war economic breakdown, with its crises of transport, food supply, fuel, productive equipment, and man-power. All these crises are intermeshed one with another, and sometimes it seems as though there is no way out of this circle which has closed around us. We know that transport cannot be restored if fuel is not supplied to the railways, but on the other hand without transport one cannot overcome the fuel crisis either: and so on.”³

¹ G. M. Krzhizhanovski, *Ob Elektrifikatsii* (1921), p. 29.

² Arutinyan and Markus, *Razvitiie Sovetskoi Ekonomiki* (1940), pp. 134-7, 157.

³ Krzhizhanovski, *op. cit.*, p. 7.

To this was added, as he pointed out, the fact that these urgent economic problems were being tackled in a vast country, at a time most complicated for any State, even were it in the most flourishing condition—"a period of transition from the system of private economy, the capitalist system, to a planned publicly-owned economy, a Socialist system".¹

Although Krzhizhanovski had spoken of an approximate ten-year period, Lenin in his speech at the same Congress spoke more cautiously of "ten to fifteen years"; and in fact the fulfilment of Soviet Russia's first economic plan showed the need for that caution. It began to be applied in 1921. The fulfilment of its several parts can be shown as follows:²

Branch of production.	Target.	When first reached.
Coal	62.3 million tons	1932
Iron ore	19.6 " "	1934
Pig iron	8.2 " "	1934
Steel	6.5 " "	1933
Oil	10.8 " "	1927/8
Manganese ore	1.6 " "	1934
Peat	16.4 " "	1934
Copper	81.9 " "	1937
Electric power (produced by regional stations)	1.75 mill. kw.h.	1931
Railways	80,000-90,000 km.	1930
All industry	80-100% above pre-war level	1929
		1913

What was the reason for this unevenness in fulfilment? The question is all the more important when we remember that the last few years (after 1929) fell in the first period of the first Five Year Plan, in which the rate of progress was much more speedy than before.

¹ Krzhizhanovski, *op. cit.*, p. 3.

² The targets of the GOELRO plan can be found in the latter's report to the VIII Congress of Soviets: *Plan Elektrifikatsii RSFSR, passim*.

In his report Krzhizhanovski had shown that great hopes had been pinned upon a development of peaceful economic relations with other countries.¹

"In spite of the world crisis at present gripping industry in all countries, we still have the right to reckon on a growth of foreign trade, and the significance of the Russian market and the necessity of large-scale electrification in our country is adequately understood at present abroad. . . . Both the Germans and the Americans must realise the coming importance of the Russian market and the unquestionable necessity that Russia should outlive her present economic collapse. . . ." ²

Seven years later, at the XV Congress of the Communist Party of the Soviet Union (December, 1927), he estimated that expenditure on power-stations, industry and transport under the 1920 plan would have been about 17 milliard roubles.³

"We then clearly realised that the accumulation of our own resources in industry would hardly be enough to enable us to overcome economic breakdown in industry, and we thought that for all this vast construction we should be able to take advantage of the consumption demand in Europe, rapidly expanding our export items, and particularly to rely on the post-revolutionary revival of the peasantry. And we reckoned then that in 10-15 years we should be able to build up a positive trade balance of about 11 milliard roubles. This meant a deficit of 6

¹ As late as March, 1922, I. Stepanov, in his book *Elektrifikatsia RSFSR* (published 1923), which was strongly recommended by Lenin in a striking foreword, wrote: "Successful Socialist construction is possible only by using the vast resources of West European industry" (p. 161).

² *Op. cit.*, p. 39.

³ *XV Svezd VKP*, 1927 (Bulletin No. 21), pp. 6-7.

milliards. But further we said that probably the West would be obliged to enter into definite business contact with us. We reckoned then on a wide programme of concessions, hoped for credits, and thought that with the help of credit operations and concessions we should manage to wipe out the deficit; and we boldly set sail."

It is important at this point not to be deflected from the examination of Soviet experience in planning by one's approval or disapproval of Socialism, by doubts whether the Bolsheviks had the right to expect that capitalist States would help them to carry out constructive plans, even by mutually profitable trade, and so forth. The point is that in their planning the Soviet leaders did make normal and peaceful relations with the capitalist world an essential part of their long-range programme. And in this respect they were disappointed. For one thing, as Krzhizhanovski himself remarked, "The blow we suffered from the famine of 1921 showed us at once how incorrect it was to count on export surpluses with the help mainly of our agriculture."¹ The following year, at the International Economic Conference of Genoa, when the Soviet leaders offered, with the help of credits from abroad, to use Siberia "to enlarge the basis of European industry so far as concerns raw materials, grain and fuel, in proportions far exceeding the pre-war level",² they learned that the condition for any assistance at all was the denationalisation of industry and the placing of Soviet economy under foreign control. Until the end of 1923 they were not even allowed diplomatic relations with the principal European countries. At the end of 1924 trade treaties which they had concluded with Great Britain in

¹ *XV Syezd VKP*, 1927 (Bulletin No. 21), p. 7.

² Speech by Chicherin, 10th April, 1922, printed in *The Soviet Union and Peace* (1929), p. 84.

application of the principles put forward at Genoa—with financial risks to Britain which must seem incredibly modest today—were refused ratification by the new Government formed after the General Election. In 1925 the Western Powers concluded the Locarno Pact, which temporarily, at least, bolted the door to war in the West while leaving it wide open in the East—against the Power which the Under-Secretary for the Colonies at the time, justifying the Locarno Pact, described as "the most sinister force that has ever arisen in European civilisation".¹ These and similar obstacles to tranquil and normal development of economic relations with capitalist countries succeeded one another throughout the period of the GOELRO Plan; and even the system of guaranteeing export credits was not extended to Russia by the British Government (even partially) until the world was struck by the "economic blizzard" which began in 1923.

In this way, not only did Soviet leaders make the full development of their constructive work depend from the first upon normal relations with other countries, but they had impressive and far-reaching proof of how injurious it was not to have such relations. The Soviet leaders proved, still more impressively, that they could successfully overcome such barriers; but they never failed to deplore the necessity.

This was shown during the period of the first Five Year Plan (1929–32), which now embraced some fifty branches of industry—in itself marking how much progress had been made in the technique of planning since 1920. The aim of the Plan, now that the pre-war level of production had been reached and in many cases exceeded, was to increase productivity of labour in such a way as would "guarantee the systematic supremacy of the Socialist

¹ Speech by Rt. Hon. W. G. A. Ormsby-Gore, 24th October, 1925.

sector of national economy over the capitalist sector . . . and will thus guarantee that the capitalist forms of economy will be overcome and eliminated".¹ This was a daring attempt, involving great efforts and great difficulties; and abroad it was ridiculed as a gamble and Utopian even before it started. Nevertheless, it was successful in the main. Stalin reported on this subject to the leadership of the Communist Party in January, 1933:

"We did not have an iron and steel industry, the foundation for the industrialisation of the country. Now we have this industry.

"We did not have a tractor industry. Now we have one.

"We did not have an automobile industry. Now we have one.

"We did not have a machine-tool industry. Now we have one.

"We did not have a big and up-to-date chemical industry. Now we have one.

"We did not have a real and big industry for the production of modern agricultural machinery. Now we have one.

"We did not have an aircraft industry. Now we have one.

"In output of electric power we were last on the list. Now we rank among the first.

"In output of oil products and coal we were last on the list. Now we rank among the first.

"We had only one coal and metallurgical base—in the Ukraine—which we barely managed to keep going. We have not only succeeded in improving this base, but have created a new coal and metallurgical base—in the East—which is the pride of our country.

"We had only one centre of the textile industry—

¹ Stalin, *Leninism* (English edition, 1944), p. 283.

in the north of our country. As a result of our efforts, we will have in the very near future two new centres of the textile industry—in Central Asia and Western Siberia.

"And we have not only created these new great industries, but have created them on a scale and in dimensions that eclipse the scale and dimensions of European industry.

"And as a result of all this, the capitalist elements have been completely and irrevocably eliminated from industry, and Socialist industry has become the sole form of industry in the U.S.S.R.

"And as a result of all this, our country has been converted from an agrarian into an industrial country: for the proportion of industrial output, as compared with agricultural output, has risen from 48% of the total in the beginning of the Five Year Plan period (1928) to 70% at the end of the fourth year of the Five Year Plan period (1932).

"And as a result of all this, we have succeeded by the end of the fourth year of the Five Year Plan period in fulfilling the programme of general industrial output, which was drawn up for five years, to the extent of 93.7%, and in increasing the volume of industrial output more than *threefold* as compared with the pre-war output, and more than *twofold* as compared with that of 1928."¹

What made these achievements particularly remarkable in the eyes of the Soviet people, as innumerable resolutions at meetings of factory workers, peasants, clerical workers and intellectuals showed, was that they were secured in spite of very adverse external conditions. Stalin himself had remarked on one big reason for this, at the meeting mentioned earlier. He said:

"It is true that we are 6% short of fulfilling the general programme of the Five Year Plan. But this

¹ *Leninism* (1944), p. 414.

is due to the fact that, in order to improve the defences of the country in view of the refusal of neighbouring countries to sign pacts of non-aggression with us, and in view of the complications that arose in the Far East, we were obliged hastily to switch a number of factories to the production of modern weapons of defence. And since this involved the necessity of going through a certain period of preparation, these factories had to suspend production for four months, which could not but affect the fulfilment of the general programme of output provided for in the Five Year Plan during 1932. As a result of this operation, we have completely closed the breach in the defences of the country. But it could not but affect the fulfilment of the programme of output provided for in the Five Year Plan.”¹

Furthermore, the world economic crisis which broke out at the end of 1929 lasted for practically the entire period of the Five Year Plan. There was, consequently, a heavy fall in the prices of those very raw materials on the export of which the U.S.S.R. was relying to accumulate the foreign currency wherewith to buy equipment for its growing industries and tractors for its agriculture. This cost the U.S.S.R. “additional hundreds and hundreds of millions of roubles in gold”, said Molotov at the same meeting in January, 1933. But what made matters still more complicated was that, as he put it, “if the war danger came near to us more than once during these years, the economic war against the U.S.S.R. on various sectors of the external market has been carried on, and is being carried on, without a breathing space.”²

The details of this economic war have begun to be forgotten. In 1930 they had included a campaign in Great

¹ *Leninism* (1944), p. 415.

² V. Molotov, *Zadachi Pervogo Goda Vtoroi Pyatiletki* (1933), pp. 45-6.

Britain and elsewhere against alleged religious persecution in the U.S.S.R. and, later in the year, against alleged “dumping” of Soviet wheat and timber: both with the declared object of inducing business interests not to trade with the Soviet Government. Some success outside this country was won by these campaigns. In October, 1930, France instituted an economic blockade of Soviet goods, and early in 1931 Canada followed suit. The existence of the Labour Government in Britain, which signed a trade agreement with the U.S.S.R. in April, 1930, for a time interfered with the campaign in this country; but in February, 1931, leading politicians and business men formed a “Trade Defence Union” for the express purpose of combating trade with the U.S.S.R., and in November of the same year the British National Government already cut the duration of export credits on Soviet imports from two years to one. Throughout 1931-2 the Bureau of Research on Russian Economic Conditions of Birmingham University published weighty memoranda proving the failure and collapse of Soviet economic efforts; and in 1932 a new campaign against Soviet goods was started in Great Britain, on the grounds that they were allegedly produced by “forced labour”. When the campaign had been worked up to a considerable height, the Anglo-Soviet trade agreement of 1930 was denounced by the British Government.¹

Thus once again the Soviet Union had tangible evidence—if it had needed it—of the relative advantages and disadvantages of normal relations with non-Socialist countries.

¹ For the details of this campaign, see W. P. and Z. Coates, *History of Anglo-Soviet Relations*, Chapters XV-XVIII.

3. PLANNING IN THE HITLER PERIOD, 1933-41

The aims of the second Five Year Plan, adopted by the XVII Congress of the C.P.S.U. in 1934, were still more far-reaching than those of the first Plan, the achievements of which they could take as a basis. They were (i) "the completion of the reconstruction of the whole of national economy"; (ii) the final elimination of capitalist elements in Soviet society, and of classes in general, with the economic causes which gave rise to them; (iii) a considerable growth of real wages, with a two to threefold rise in the level of consumption; (iv) "to overcome the survivals of capitalism . . . in the consciousness of man".¹ This time no fewer than 120 branches of industry were brought within the scope of the new Five Year Plan.

The Soviet leaders made no secret of their desire to preserve peaceful and normal relations with other countries, in order to have the opportunity of performing as smoothly as possible the tasks they set before themselves. It was on this occasion that Stalin made the memorable observation: "Those who want peace and seek business relations with us will always have our support. But those who try to attack our country will receive a crushing repulse, to teach them not to poke their pigs' snouts into our Soviet garden."² His preceding remarks had made it clear that he was referring in particular to the rulers of Germany and Japan, and to "a certain section of the English Conservatives". But at the same time, he said, while relying on its own economic and political strength, on its army, and on the moral support of the peoples in every country vitally interested

¹ V. Molotov, *Tasks of the Second Five Year Plan*, Moscow (1934), pp. 110-11.

² *Leninism* (1944), p. 486.

in the preservation of peace, the U.S.S.R. was also relying "on the prudence of those countries which for one motive or another are not interested in disturbing the peace, and which want to develop commercial relations with such a punctual client as the U.S.S.R." The Soviet Union's foreign policy was one of "preserving peace and strengthening commercial relations with all countries".¹

The success of the second Five Year Plan was even more marked than that of the first. In fact, the output of industry during the period was more than doubled, and the whole increase in output was accounted for by Socialist, publicly-owned enterprise. Private industry had shrunk to a minute fraction—0.03% of the total—represented by small handicraftsmen.² Moreover, 80% of Soviet industrial output was accounted for by new or completely reconstructed works of all kinds.³ So also in agriculture. The 240,000 collective (*i.e.* co-operative) farms which had replaced small-scale individual farming since 1930 were uniting more than 93% of all peasant households, and accounting for 97% of the grain-crop area. Technically, agriculture had also been in the main reconstructed, by the creation of more than 6000 State machine and tractor stations to serve the collective farms.

As for the capitalist elements, which in 1928 had still amounted to 5% of the population—in the shape of rich peasants (*kulaks*) who rented their neighbours' land in order to farm it with the help of hired labour, and also of a certain number of people living by private trade—these had completely disappeared as a class, and were engaged upon more useful pursuits.⁴ Private traders in

¹ *Leninism* (1944), pp. 482, 484-5.

² Stalin, *Leninism* (1944), pp. 631, 635, 637.

³ Molotov, *Tretii Pyatiletnii Plan* (1939), p. 7.

⁴ *Ibid.*, p. 6.

1928 had still accounted for 20% of retail trade; by 1930 their share was only 5.6%, and thereafter they had been completely absorbed by the State or co-operative trade machinery.¹

In respect of the standard of living, the programme had in fact been carried out by 1937: real wages had doubled, and the income of each peasant household in the collective farms had increased three and a half times.² Rationing, reimposed during the period of greatest strain in the first Five Year Plan, was abolished in 1934 as a result of the greater abundance of foodstuffs and raw materials.

Progress had been made in overcoming "the survivals of capitalism in the mind of man". The Stakhanov movement was the most striking response to this part of the Five Year Plan. Stalin defined it as "a movement of working men and women which sets itself the aim of surpassing the present technical standards, surpassing the existing designed capacities, surpassing the existing production plans and estimates". But its significance did not end there, he said. It also represented the "first beginnings" of that rise in the cultural and technical level of the working class which would be required to eliminate the distinction between mental labour and manual labour. And upon the elimination of that distinction—the heritage of past forms of society—depended whether the country could move from Socialism to Communism—i.e., from a condition in which "each works according to his ability and receives articles of consumption, not according to his needs, but according to the work he performs for society", to a condition in which "each works according to his abilities and receives articles of consumption, not according to the work he

¹ *Fulfilment of First Five Year Plan*, Moscow (1933), p. 207.

² Arutinyan and Markus, *op. cit.*, pp. 562-3.

performs, but according to his needs as a culturally developed individual".¹ The fact that those participating in the Stakhanov movement numbered some 25% of the working class by the end of the second Five Year Plan² was one of the signs that the elimination of non-Socialist influences in the mind of man, the substitution of a wider social horizon in the mind of the worker for the old horizon limited by his personal interests, was at any rate well begun.

However, just as with earlier plans, these results had been attained in circumstances extremely complicated by external difficulties. Again and again during the years from 1933 to 1937 the Soviet Union was reminded of its environment of capitalist States. Summing up the results of the period at the XVIII Congress of the C.P.S.U. in March, 1939, Molotov said:

"We must place on record that, in the Second Five Year Plan as well, the growth of heavy industry proceeded much more rapidly than of industry producing articles for mass consumption. The main cause of this was the fact that during the fulfilment of the second Five Year Plan we had to make important corrections to the plan for the development of industry. Just as in the first Five Year Plan, the international situation obliged us to raise the speed of development of defence industry which we had fixed, and (as you know from the speech of comrade Voroshilov at this Congress) we did quite a lot in this respect. This required a considerable quickening of the expansion of heavy industry, and this to a certain extent at the cost of slowing down the growth of light industry."³

¹ *Leninism* (1944), pp. 546-8.

² Lyapin, *Sotsialisticheskaya Organizatsia Obschestvennogo Truda* (1945), p. 25.

³ Molotov, *Tretii Pyatiletnii Plan*, p. 8.

In fact, the period of the second Five Year Plan had been that of the establishment of the Nazi Government in Germany, of its open preparations for a war of revenge, of its coalition with the Fascist and aggressive forces of Italy and Japan, and of the successive attacks on Ethiopia, Spain and China which marked the beginning of the Second World War. What complicated the situation particularly, from the point of view of the U.S.S.R., was, on the one hand, that open challenges to the Nazi leaders by Stalin at the XVII C.P.S.U. Congress in 1934, and by Molotov at the VII All-Union Soviet Congress in 1935¹—to say whether their plans for expansion at Soviet expense still held good—had been ostentatiously ignored. On the other hand, equally ostentatious were the public expressions of the view in Western countries, particularly in Great Britain, that both Hitler and Japan would do well to act as “one-way guns”—*i.e.*, to attack the Soviet Union and leave their other neighbours alone.² This was

¹ *Leninism* (1944), pp. 484–5, and *Soviet Progress 1930–34* (Anglo-Russian Parliamentary Committee, 1935), pp. 16–17 (for Molotov's speech).

² Perhaps one illustration will not be out of place. Commenting on the seizure of Czechoslovakia by Hitler—*i.e.*, as late as 1939—one of the most authoritative and accepted textbooks of European history, used in the upper forms of public schools and in the Universities of Great Britain, stated:

“Everything suggests that Hitler purposes in the future the maintenance of a defensive in the West, while his active designs are in the East. . . . At any rate, it is rather difficult to see how he can combine a drive towards the East with a campaign against France in the West. . . . If (Germany) wants the Ukraine she will ultimately have to fight the Soviet Republic. But her line of penetration may be peaceful and economic, at any rate for some time, and it at least avoids all conflict with either England or France or any notable democratic State. The idea that Germany with her immense resources, her teeming population, her deep sense of injury and loss, could be at once deprived of all her overseas possessions and at the same time shut out from expansion in Europe, was a profoundly mistaken one. The Ukraine is, in

a period of intense activity by Soviet diplomacy to substitute for such a prospect one of collective resistance to aggression. It was the period of the attempts to conclude an “Eastern Locarno”, in order to normalise Soviet-German relations, and of the Soviet Union's entry into the League of Nations (1934); of the pacts of mutual assistance concluded by the U.S.S.R. with France and Czechoslovakia (but open to adherence by Germany) and of the Soviet Union's offer to join in oil sanctions against Italy, in defence of Ethiopia (1935); of the Soviet Union's pressure for collective support of the Spanish Republic and of China against the aggressors, and of single-handed Soviet support of both victims of the Fascist bloc, with armaments and otherwise, as an encouragement to others (1936–37).

But all these efforts were in vain. The Western countries were ruled by governments who were guided in their international policy at that time by the idea of non-intervention—particularly where proposals put forward by the Soviet Union were concerned. Stalin characterised this policy, at the XVIII Party Congress, as follows: ¹

“The policy of non-intervention means conniving at aggression, giving a free rein to war, and consequently transforming the war into a world war. The policy of non-intervention reveals an eagerness, a desire, not to hinder the aggressors in their nefarious work: not to hinder Japan, say, from embroiling

German eyes, a perfectly legitimate object of ambition, and it is historically true that a great and powerful State must expand somewhere. . . . The idea that a nation, so rich in man-power, in scientific knowledge and in human energy as Germany, can be penned within a cage, ought to be dismissed as absurd.”

(Grant and Temperley, *Europe in the Nineteenth and Twentieth Centuries*, fifth edition, Jan., 1939, pp. 684–6.) The italics are mine.

¹ *Leninism* (1944), p. 626.

herself in a war with China, or better still with the Soviet Union: not to hinder Germany, say, from enmeshing herself in European affairs; from embroiling herself in a war with the Soviet Union: to allow all belligerents to sink deeply into the mire of war, to encourage them surreptitiously in this: to allow them to weaken and exhaust one another: and then, when they have become weak enough, to appear on the scene with fresh strength, to appear of course 'in the interests of peace', and to dictate conditions to the enfeebled belligerents."

Stalin remarked that this was a big and dangerous political game, which might end in a "serious fiasco" for the supporters of the policy of non-intervention. But the Soviet Union, of course, could not take comfort in that prospect.

It is in the light of this international situation, and of the growing menace of attack from without, that one must interpret the serious interference with the constructive aims of the second Five Year Plan expressed in the following table, which shows the rapid growth of the burden of armaments on Soviet finances:

Year.	Amount of defence expenditure (milliard roubles).	Percentage of total Budgetary expenditure.
1933	1.4	3.5
1934	5	9.5
1935	8.2	12.0
1936	14.9	17.2
1937	17.5	17.4

The strength of the Red Army rose during these years from 562,000 in 1933 to 940,000 the following year and to 1,300,000 by 1937.¹ How much more rapid the progress

¹ The Budget figures and proportions spent on defence are to be found in Baykov, *op. cit.* passim. Red Army figures are in speeches printed in *Soviet Progress 1930-34*, p. 41, and *Soviet National Economy* (Anglo-Russian Parliamentary Committee, 1936), p. 67.

in economic and cultural development would have been without this unexpected extra burden, everyone in the Soviet Union had ample opportunities and encouragement to realise.

By 1940 the defence expenditure, at 56.1 milliard roubles, exceeded 30% of the Budget, and it was no mere coincidence that that year the seven-hour day in industry, introduced in 1927 to celebrate the tenth anniversary of the Revolution, was replaced once more by the eight-hour day.¹

The third Five Year Plan, adopted in 1939 but covering the period from 1938 to 1942, was also being largely fulfilled when the German attack came in June, 1941. It is worth quoting the not very well-known summary for this period given in the first section of the Law on the fourth Five Year Plan, adopted in March, 1946:

"Socialist industry was making rapid headway. Industrial output showed an annual average increase of 13%. Big strides were being made in particular in the development of heavy industry. In the first three years of the third Five Year Plan the output of the means of production increased by more than 50% . . .

"Industry was rapidly developing in the eastern regions of the U.S.S.R. In the Urals, the Volga areas, Siberia, Central Asia and Kazakhstan, industrial output in the first three years of the third Five Year Plan increased by 50%.

"The cereal crop in 1940 amounted to 119,000,000 tons. One of the richest grain-growing areas of the

¹ The other side of the picture is shown by the rapid reduction in Soviet defence expenditure, both relatively and absolutely, once the danger of Fascist aggression disappeared. The figures were given by the Union Minister of Finance in his budget speech on 20th February, 1947: they were 59.5% of total expenditure in 1943, 52.2% in 1944, 42.9% in 1945, 23.9% in 1946, 18% in 1947, and 17% in 1948.

Soviet Union was created in the eastern part of the country. . . .

"Some 3000 State-owned mills, factories, mines, power-stations and other enterprises were put into operation. More than one-third of the capital construction in this period fell to the eastern areas of the U.S.S.R. . . .

"In 1940 there were produced in our country 15 million tons of iron, or nearly four times as much as in 1913; 18.3 million tons of steel, or four-and-a-half times as much as in 1913; 166 million tons of coal, or five-and-a-half times as much as in 1913; 38.3 million tons of marketed grain, or 17 million times more than in 1913; and 2.7 million tons of raw cotton, or three-and-a-half times as much as in 1913. With the help of Socialist industry, the reconstruction of the railway system was undertaken.

"This was accompanied by a continual improvement of the living and cultural standards of the peoples of the U.S.S.R. . . ."

It is hardly necessary to emphasise the point that the progress of this third Plan, which embraced about 200 branches of industry, no less than the terrible consequences of its interruption by war, only sharpened the lessons which all the preceding history of the U.S.S.R. had taught.¹

4. THE WAR AND AFTER

Peace-time plans were abandoned when the U.S.S.R. was attacked, and a "Mobilisation Economic Plan" for the third quarter of 1941 was adopted. It provided for a reduction of building works anticipated in 1941 to one-third of what had been planned; for the concentration of resources in materials, finance and man-power on

¹ Summary figures of the degree of fulfilment of the Plan by June, 1941, were published by Voznesensky, *Voyennaya Ekonomika SSSR* (1947), pp. 14-15.

defence construction; for an immense increase in the output of special machine-tools, presses, high-quality steel, high-octane petrol, uniforms and other equipment for the fighting forces; for the rapid expansion of works and power-stations in the Urals, the Volga regions and Western Siberia; and for the building up of fuel reserves by the winter. This plan was succeeded, in August, 1941, by a "War Economy Plan" for the eastern regions, extending this time far into Asia, which it was proposed to develop rapidly as a seat of large-scale war industry. The plan covered the fourth quarter of 1941 and the whole of 1942, and included the transfer of war plants and their auxiliary factories from areas menaced by the enemy.¹

More than 1360 large industrial plants were evacuated in this way (1,200,000 railway truckloads of machinery), and in the main were already at work again during the first half of 1942. As a result of these plans, and of their successors adopted in the following years, industrial output in the eastern areas of the U.S.S.R. was twice as great at the beginning of 1945 as it had been in the first half of 1941, while the output of the war industries was more than five-and-a-half times as great. The change brought about by the revolution can perhaps be illustrated even more strikingly by the following fact.

During the war with Germany of 1914-17 the Tsarist Army had depended on foreign imports for 60% of its rifles and cartridges, 72% of its guns and 75% of its shells, 97% of its lorries and 100% of its caterpillar tractors.² It was as a consequence of this situation that the Russian soldiers were in the dreadful condition of the autumn of

¹ Sorokin, *Sotzialisticheskoe Planirovanie Narodnogo Khoziaistva SSSR* (1946), pp. 54-5; *Law on the Five Year Plan* (1946), p. 6; and broadcast by P. Moskatov, head of Chief Department of Labour Reserves (*Soviet Monitor*, 2nd November, 1944).

² *Pravda*, 23rd February, 1936.

1916, without supplies, with one rifle between three or four men and with one or two shells per gun per day.

During the second war with the Germans, from 1941 to 1945, the Soviet Union received from its Allies—Great Britain, the United States and Canada—a total of 9214 tanks in three years, while manufacturing over 90,000 tanks itself; 12,258 planes, while producing 120,000 itself; 31,265 anti-aircraft and anti-tank guns (no other artillery), while producing over 360,000 guns of all types itself. In all, the Soviet Union received from its Allies in three years just over 40 million shells; it produced in its own factories 240 million shells during 1944 *alone*. Similarly, in the same year it produced 7400 million cartridges, while from its Allies it received throughout the war a total of just over 1316 million cartridges.¹ These and similar figures mark the profound economic change which enabled the U.S.S.R. victoriously to withstand a shock far greater than that which had laid Tsardom low.

No Soviet publication during the later war years and since, no conversation with any Soviet citizen, but reveals legitimate pride in these achievements. Yet the pride is always accompanied by regretful thoughts of what might have been achieved in more peaceful and humane fields, but for the war imposed on the U.S.S.R. In this respect there is absolute continuity in Soviet thought, from the very first days after the revolution. The regret is all the more real because of one special aspect of the interrupted third Five Year Plan and of its successor, the fourth Five Year Plan (1946-50), which has not yet been noticed. Voznesensky, the chairman of the State Planning Com-

¹ For imports, see *Soviet Foreign Policy during the Patriotic War* (1946), vol. ii, pp. 86-8; for Soviet armaments and munitions production, see *Law on the Five Year Plan*, p. 8.

mission, said in his report at the Supreme Soviet of the U.S.S.R. on 15th March, 1946:

"The Five Year Plan, while providing for the restoration and development of the national economy of the U.S.S.R., at the same time marks a resumption of the path of development of Soviet society which was outlined at the XVIII Congress of the C.P.S.U., but which was temporarily interrupted by Hitler Germany's treacherous attack on the U.S.S.R. This envisages the completion of the building of a classless Socialist society, and the gradual transition from Socialism to Communism. It envisages the accomplishment of the basic economic task of the U.S.S.R., namely, to overtake and surpass the main capitalist countries economically, as regards the volume of industrial production *per head of the population*."¹

This problem had already been put squarely by Stalin in 1939. The U.S.S.R., as we have seen, had successively solved the problems of reaching pre-war levels in output, of building up on that basis an industry capable of transforming all economy, and then of actually carrying out that transformation by eliminating all except publicly-owned enterprise from agriculture, industry and trade, with corresponding improvements in standards of living, culture and attitude to work itself. But this was not enough.²

"We have outstripped the principal capitalist countries as regards technique of production and rate of industrial development. That is very good, but it is not enough. We must outstrip them economically as well. We can do it, and we must do it. Only if we outstrip the principal capitalist countries economically can we reckon upon our country being fully saturated with consumers' goods, on having an

¹ Published by *Soviet News* (1946), p. 10.

² Report at XVIII Party Congress, in *Leninism* (1944), p. 633.

abundance of products, and on being able to make the transition from the first phase of Communism to its second phase."

The economic power of a country's industry, Stalin explained, was not expressed by the volume of industrial output as a whole, irrespective of the size of the population, but by the volume of industrial output *per head of the population*. He illustrated this by several comparisons with Great Britain. In 1938 the U.S.S.R. had produced more than twice as much pig-iron as Great Britain; but Soviet output per head was only three-fifths of British. Again, Soviet output of steel was nearly 70% more than that of Great Britain in the aggregate, but less than half the British output per head; and output of electricity totalled 39 milliard kilowatt-hours in the U.S.S.R. and 29 milliards in Great Britain, but only 233 kw.h. per head in the U.S.S.R., as against 620 kw.h. in Great Britain.¹

Molotov, in his report on the third Five Year Plan at the same Congress, had taken up this point, reinforcing it by an impressive array of figures, in which the U.S.S.R. was compared with the other five Great Powers of the day—including, of course, Germany and Japan—not only in basic industries such as those mentioned by Stalin, or coal and cement, but also in the output of consumption goods such as cottons and woollens, leather footwear and paper, sugar and soap. In nearly all these spheres output per head showed the U.S.S.R. lagging behind the other Great Powers, in spite of its Socialist achievements. Why was this? he asked; and answered his own question. "The reply is clear. It is because our country was quite recently still terribly backward in the industrial sense, and on account of the great size of its population had extremely low levels of industrial

¹ Report at XVIII Party Congress, in *Leninism* (1944), p. 633.

production per head. During the short space since then she has not had the opportunity fully to make up for lost time." He recalled how Lénin, as recently as 1913, had written in *Pravda*:

"Russia remains an incredibly, unprecedentedly backward country, beggarly and half-savage, equipped with modern implements of production four times worse than Britain, five times worse than Germany, ten times worse than America."¹

The increased levels of production provided for under the third Five Year Plan had as their objective to make good some of the distance which still separated the U.S.S.R. from the most advanced capitalist countries in this all-important respect. Voznesensky had also stated at the XVIII Party Congress that the Soviet industrial worker was still producing two to two and a half times less per head than the United States workman.

How long would it take to catch up? Stalin had said in general that it would "require time, and no little time at that": later in the same speech, he had put it at "the next ten or fifteen years". At least two or three more Five Year Plans would be needed, said Molotov: it would be a period of peaceful rivalry with the capitalist countries, rivalry which threatened no one. And it is significant that, when the menace of war was very close, and by no means concealed from the Soviet leaders, they instructed the State Planning Commission on 22nd February, 1941—that is, when the favourable results of the first three years of the Five Year Plan were already manifest²—"to begin compilation of a general economic plan of the U.S.S.R.

¹ Molotov, *op. cit.*, pp. 14-16.

² Voznesensky's survey of Soviet war economy prints some details of the degree of fulfilment of the Third Plan by June, 1941 (*Voyennaya Ekonomika SSSR*, 1947, pp. 14-15).

for 15 years ahead, calculated to solve the problem of overtaking the principal capitalist countries in production per head of the population—in respect of iron, steel, fuel, electric power, machinery and other means of production and articles of consumption”.

It was almost exactly five years later, after the most frightful devastation imposed in modern times upon any country, that Stalin in an election speech (9th February, 1946) mentioned a series of production levels, as the objective of long-term planning, which would in fact bring the U.S.S.R. to the position discussed at the XVIII Congress of the C.P.S.U.:

“As to plans for a longer period, our Party intends to organise a new powerful upsurge of the national economy which would enable us, for instance, to raise the level of our industry threefold as compared with the pre-war level. We must achieve a situation wherein our industry is able to produce annually up to 50 million tons of pig-iron, up to 60 million tons of steel, up to 500 million tons of coal, up to 60 million tons of oil. Only under such conditions can we regard our country as guaranteed against any accidents. This will require perhaps three new Five Year Plans, if not more. But this task can be accomplished, and we must accomplish it.”¹

The figures of iron and steel mentioned by Stalin were precisely those which he and Molotov had given in March, 1939, as necessary if the U.S.S.R. were to catch up with U.S.A. output per head (in the boom year of 1929). But in order to make this extraordinary advance, the ground to be covered was even greater than it was in 1939.

5. THE PROBLEM OF DEVASTATION

At this point it becomes necessary to consider the problems created in the U.S.S.R. by German devastation;

¹ *Stalin and Molotov Address Their Constituents* (Soviet News, 1946), p. 17.

and their full gravity will perhaps be best understood if we make what at first sight may seem a digression.

Much was written in Europe and America, from July, 1945, onwards, about the alleged harshness of the Potsdam agreement concluded in that month. The principles governing reparations and the destruction of the roots of Nazism and militarism in Germany came under heavy fire. Such a responsible journal as *The Economist* declared that the application of Potsdam would transform Germany into an “economic slum”. The chairman of the *News-Chronicle* spoke of her becoming “a desert in the centre of Europe”. At the Moscow discussions of the Foreign Ministers in March, 1947, the British Foreign Secretary saw the possibility of Germany sinking into an “economic cesspool”.

It is not the purpose of this book to enquire whether these diagnoses were justified or not. But it will be useful to examine their implications.

What had the Allies laid down for German economy? It was that by 1949 German industry was to reach a level of output equal to 50–55% of the 1938 figures, except for coal, of which the output should be raised to the maximum, and for steel, of which a maximum figure was fixed to reduce Germany's war potential. Not many writers have taken the trouble, when deploring the harsh treatment of Germany, to reveal what this permitted level would mean. Yet the official figures were published in March, 1946 (e.g., by the *Tägliche Rundschau* of 29th March, 1946). They show that even the figure for steel output permitted (5·8 million tons) was higher than that of any other country in 1938 except the U.S.A., the U.S.S.R., Great Britain and France, while the output capacity allowed (7·5 million tons) was higher than French production that year as well. For electric power the output capacity

permitted (9 million kilowatts) was 60% of the 1936 level, when Germany produced 42.5 milliard kilowatt-hours of electricity. 60% of this—25.5 milliard kw.h.—would have left Germany almost level with Canada in 1938, and lower only than the U.S.A., U.S.S.R. and Great Britain.¹ The permitted output of cement (8 million tons) left Germany producing more than any other country in the world in 1938, except the U.S.A. Germany was allowed to build 40,000 lorries a year (more than 60% of her 1938 figure): this was as many as Canada produced in 1938, and less only than the output of the U.S.A., the U.S.S.R. and Great Britain. The German engineering industry was allowed 30% of its 1938 output of heavy material and 50% of light material—a total of 1.6 milliard marks, as against the 1938 total of 4.4 milliard marks, or 38.1%. This (representing an index of 56.4 in comparison with 1928) would have brought Germany back to the level of 1933-4, when Hitler had already begun his large-scale re-armament programme and German engineering products were successfully competing with British in many markets. Paper output, at 2,129,000 tons, would have been less (by a trifle) than that of Britain in 1938, and also less than American and Canadian output—but more than that of any other country. While basic (war) chemical output was to be reduced to 40% of the 1936 figure—putting Germany back to sixth or seventh place in the world—her output of general chemicals, at 1473 million marks, was to be 70% of her 1938 level, leaving her still far ahead of any other country except the U.S.A. and the U.S.S.R.

As for coal production, Germany's territorial losses

¹ For *electricity*, see the League of Nations Statistical Year Book, 1938-9, pp. 132-3; for *cement*, *ibid.*, p. 131; for *lorries*, p. 197; for the *engineering index*, p. 186; for *paper*, p. 130; for *chemicals*, pp. 166-9; for *coal*, p. 141.

might reduce the 1938 total from 186 million tons to the permitted capacity of 155 million tons of Ruhr coal and lignite. But this output would still leave Germany third in the world table of 1938 coal production, following Britain and America, well above the U.S.S.R., and still producing more than France, Belgium, Holland, Poland and Czechoslovakia did together in that year.¹

These reductions might be a very sensible blow to Germany's industrial domination of Europe, especially if they had been effected by transferring industrial equipment to countries which in 1938 were helpless in her financial and economic grip. But, whether measured in aggregate figures or in output per head of the population, it is perhaps disputable whether they would necessarily have transformed Germany into a "slum"—any more than the countries which she surpassed were "slums" in 1938.

The relevant feature of the criticisms which were expressed on this subject in Britain and America in 1946, however, is that very little comment was provoked by the evident facts of the losses sustained by the U.S.S.R., although these were far greater than those which Germany was to suffer under the Allied terms.

Thus, in the Donetz and Moscow coalfields the Germans destroyed mines with a total output of 100 million tons

¹ The new levels permitted for German industry in the Anglo-American zones, which were announced on 30th August, 1947, raised Germany's war potential even higher, in comparison with her neighbours. The output of *steel* permitted would have made her third in the world in 1938, instead of fourth, as allowed by the arrangements of March, 1946. Her *engineering* output was to rise by 1951 to the 1936 level—when the invasion of Republican Spain was undertaken—instead of to that of 1933-4. Her output of *sulphuric acid* was to be higher than that of any other country in 1938, except the U.S.A. and the U.S.S.R. At the same time, it was announced that the list of factories scheduled for transfer as reparations was being "shortened".

yearly, out of a total output for the U.S.S.R. in 1938 of under 133 million tons.¹ They blew up iron and steel works which produced 11 million tons of pig-iron and 10 million tons of steel, while the total Soviet output of these products in 1938 was 14.6 million tons and 18 million tons respectively. They wrecked sixty-one large power-stations with an output capacity of 5 million kilowatts; while the total capacity of Soviet power-stations in 1938 was 8.7 million kilowatts. The Germans destroyed 749 engineering works, which gave employment to 919,000 workmen before the war: while before the war there were something like 2,500,000 workers engaged in the Soviet engineering industry. They destroyed 3 million spindles in textile factories—out of some 8 millions existing in 1938. The Germans destroyed nearly 32,000 industrial establishments, giving employment to 4 million workers—two-fifths of all engaged in industry in 1937—and carried off to Germany tens of thousands of machines of all kinds (including 175,000 machine-tools—about a quarter of all the Soviet Union possessed). They also wrecked 40,000 miles

¹ The figures of German destruction in the U.S.S.R. were given in "Report of the Extraordinary State Commission for Ascertaining and Investigating Crimes of the German Fascist Invaders", published on 13th September, 1945, and printed in this country in *Soviet Government Statements on Nazi Atrocities* (1946), pp. 300-17. The figures of pre-war Soviet output of coal, iron and steel can be found in Baykov, *Development of the Soviet Economic System* (1946), p. 291. Figures for the textile industry are calculated from those given for 1928 in *Sotsialisticheskoe Stroitel'stvo SSSR* (1936) and supplementary data for the period 1929-37 given by A. N. Kosygin at the Soviet of Nationalities on 28th May, 1939. For the engineering industry, the figures are recalculated from the 1935 statistics in *SSSR-Strana Sotsializma* (1936), p. 85, and the indices of engineering output in 1935 and 1938 given, on Soviet authority, by the League of Nations *Statistical Year Book* (1939-40), p. 164. The power-station capacity in 1938 is given by Lokshin, *Partia Bol'shevikov v Borbe za Industrializatsiu SSSR* (1946), p. 69. The 1938 railway mileage can be found in the article by Academician E. Varga in *U.S.S.R. Speaks for Itself* (1943), p. 61.

of railways, out of 54,000 miles existing in 1938. The Council of Ministers of the U.S.S.R. stated (*Pravda*, 1st March, 1947) that the industrial output of the Soviet devastated areas for 1946—after most of them had been liberated for eighteen months—was still less than half the pre-war level.

What did these devastations mean to Soviet citizens? It will not be out of place to quote some of the evidence.

"It is difficult for one who has not been in Belorussia to imagine the character and scale of the devastation. The invaders destroyed nearly all our industry, completely destroyed our stock of machine tools and technological equipment, blew up and wrecked 95% of the power installations. Minsk, Gomel, Vitebsk, Polotsk, Orsha and many other towns of Belorussia were subjected to vast devastation. In the countryside 412,000 houses of collective farmers, 500,000 collective farm buildings were destroyed. . . . As a result of the German occupation, the economy of our Republic proved to be profoundly undermined and disorganised, thrown back beyond the level of 1913."¹

"Our Mission has seen the Ukraine in minute detail. The devastation is appalling, and the U.N.R.R.A. programme is but a drop in the ocean compared to what is needed. I have seen the destruction caused by war in Libya, Syria, Irak, Ethiopia, Britain, France, Belgium, Poland, Czechoslovakia, Austria, Italy and Germany. The only thing that can even be compared with the devastation in the Ukraine is Warsaw and some bombed-out German cities. . . . I found the industrial plants of Kiev, Dnepropetrovsk, Dneprostroi, Kharkov and Odessa almost completely stripped of modern

¹ Speech by P. K. Ponomarenko at the Soviet of the Union, 18th March, 1946 (*Zasedania Verhovnogo Soveta SSSR, I Sessia*, 1946, pp. 276-7).

machinery and machine supplies, with buildings either razed or shattered to a mere shell. Although the area was liberated two years ago, the two largest steel plants have not yet re-started their furnaces, and little heavy industry is in action."¹

"The industry and municipal economy of the Estonian S.S.R. suffered heavily. A considerable proportion of our factories were either destroyed completely, or made unusable. Much equipment was carried off to Germany. To illustrate the destructive work of the Hitlerites, it is worth mentioning that in the textile industry, out of 700,000 spindles of pre-war days, only 16,500 spindles are left. . . . Undertakings with a capacity of 200,000 tons of shale oil a year were either completely or partially destroyed. All electric power-stations in the Republic were blown up by the Germans, with the exception of the station at Tallin. . . . Of the means of transport in the country there remain not more than 6-7%. All railway bridges were blown up."²

"The German Fascist invaders did vast damage to the economy and culture of our Republic. They destroyed about 140,000 buildings, including 5790 premises of industrial undertakings and 53 power-stations. . . . Over 47,000 dwelling houses were destroyed, 183 medical institutions, about 1000 educational establishments, children's institutions, libraries, museums, churches. The Germans did great damage to the capital of our Republic, Riga, and wrecked our large towns Liepaja (Libau), Daugavpils (Dvinsk) and Valmiera. Such towns as Jelgava and Rezekne have been wiped off the face of the earth.

"The Hitlerites completely destroyed the power base of the Republic, blew up Riga port and the

¹ Report by Marshall McDuffie, Chief of the U.N.R.R.A. mission to the Ukraine (*Times*, 6th June, 1946, *Russia Today News Letter*, 27th July, 1946).

² Speech by J. Vares at the Soviet of the Union, 25th April, 1945, *XI Sessia Verhovnogo Soveta*, 1945, p. 66.

magnificent granite embankments of the Daugava. The first-class equipment of works such as the VEF, Vairogs, Varonis, and many others was taken away to Germany or destroyed on the spot. All bridges, both on the railways and on the roads, were blown up. The railway lines for many hundreds of kilometres were ploughed up by special machines.

"The Germans completely cleaned out the working peasantry of Latvia. All the land, with its harvest, stock and equipment received by the peasantry from the Soviet power, was taken away and given to kulaks and landlords. The occupying authorities carried off to Germany or slaughtered over 800,000 head of large horned cattle, over 100,000 horses and up to one million pigs, sheep and goats. Tens of thousands of agricultural machines and implements and about half a million fruit-trees were destroyed. The Socialist sector of our agriculture—State farms, MTS and machinery and horse hiring depots—was utterly ruined. . . . That is what Soviet Latvia looked like when it was liberated by the Red Army."¹

When Lithuania was liberated, its industrial output capacity was 25% of the pre-war level; and two years later, after great efforts at reconstruction, it had reached only two-thirds of its previous dimensions, reported deputy Gedvilas at the Soviet of the Union (*Izvestia*, 21st February, 1947).

At the end of April, 1947, General Lowell Rooks, Director-General of U.N.R.R.A., stated at Kiev that he had visited Britain, Italy, Albania, Greece, Yugoslavia, Austria, Czechoslovakia and Poland before coming to the U.S.S.R.² "Everywhere I had the opportunity to observe the enormous destruction caused by the Hitlerites.

¹ Speech by Y. E. Kalnberzin at the Soviet of the Union, 16th March, 1946 (*ibid.*, p. 91).

² *Soviet Monitor*, 30th April, 1947.

... I saw the ruins of towns and villages ... the sufferings of people deprived of their homes and their means of livelihood. But nothing can be compared with the destruction and damage caused to your country."

"The total volume of damage inflicted on the city economy of Leningrad by the Fascist barbarians is assessed at 5.5 milliard roubles, which represents about 25% of the value of its basic funds. The level reached by our industry by 1946 represents only 32% of pre-war figures."¹

These are only a few illustrations of the devastation in the U.S.S.R. wrought by the Germans. It was after innumerable similar reports that Stalin on 29th October, 1946, replying to a question put by Mr. Hugh Baillie, president of the United Press of America, said that it would take "six or seven years, if not more" to rebuild the devastated areas. The fourth Five Year Plan itself lays down that, out of a record figure of capital investments during the five years—250 milliard roubles—almost half is set aside for reconstruction work in the devastated areas.

Apart from the industrial devastation, which in itself constitutes a gigantic problem for those in charge of Soviet economy, the agricultural devastation must not be forgotten—all the more because even the most ardent champions of alleviation of the Potsdam terms cannot pretend that anything even remotely resembling such ruin was visited upon German agriculture.

In the occupied regions the Germans utterly destroyed, or plundered bare, 98,000 collective farms, representing

¹ Speech by P. S. Popkov at the Soviet of the Union, 18th March, 1946 (*Zasedania Verhovnogo Soveta, I Sessia*, 1946, pp. 270-1).

the homesteads and productive equipment of many tens of millions of Soviet peasants and over two-fifths of the main section of Soviet agriculture, and over 4,700 State farms and tractor depots. In doing so the Germans killed or carried off 7 million horses (more than six times as many as there were in the entire United Kingdom in 1939), 17 million head of cattle (twice the 1939 figure for Great Britain), and 20 million pigs (more than four times as many as there were in the United Kingdom before the war). They also destroyed or took away 137,000 tractors (over a quarter of the entire pre-war tractor equipment of the U.S.S.R.) and 49,000 combine harvesters (over a quarter of the pre-war total), with 265,000 seed-drills, 885,000 harvesting and grain-sorting machines, and about 4 million ploughs, harrows and other implements.¹ And although by the end of March, 1946, 1½ million houses had been rebuilt in the villages of the devastated areas, there still remained another 2¼ million to be built in these same areas, under the fourth Five Year Plan.²

It is hardly surprising that the considerable drought in Moldavia, Ukraine and the Lower Volga regions in 1946, which affected an area larger than that of the 1921 famine, found these areas with their productive forces seriously weakened, and consequently brought great difficulties in the food situation of the U.S.S.R., complicating its plans for many months ahead.

It must be noted that there were no public meetings of charitably-minded persons, no letters to *The Times* or other newspapers, about these man-made disasters. Those familiar with Soviet history will know that this is

¹ Extraordinary State Commission, *Report* already quoted, 13th September, 1945.

² *Law on the Five Year Plan*, 1946, pp. 29, 58.

no new experience for the U.S.S.R.; Soviet economic efforts in the past were in the main put forth without material assistance from abroad, Soviet citizens did not expect such assistance, even from their closest Allies, now—and they were not disappointed. However, if the comparison between the proposed reduction of German industrial capacity and the actual devastation inflicted on Soviet industry has been made in the foregoing pages, it is not for purposes of polemics: it is only to underline that, whatever conclusions may be drawn about the fate of Germany if the economic plans of the Allied Control Council had been put into force, they apply with far greater truth to the difficulties created for the U.S.S.R.

This being so, the reader is in a better position to judge now whether it is helpful, as a guide to the probable development of international relations, to interpret even large capital investments under the fourth Five Year Plan as proof of a policy of "guns instead of butter". The fact is that the German devastations have hung like a heavy millstone about the neck of Soviet economy, making the most peaceable foreign policy a vital necessity for the U.S.S.R., even if constructive work in every direction, planned for the undevastated areas of the country, did not itself require it.

To judge of the long-term effects of wartime destruction, it will be sufficient to compare the targets originally put forward in a number of fields for 1942, under the third Five Year Plan, with the target now advanced for 1950, under the fourth. For purposes of comparison, the aims of the "plans for a longer period", given by Stalin, are also included, where possible—with the levels reached in 1940, after three successful years of economic expansion.

Branch of production.		Planned output 1942 (third Five Year Plan).	Actual output 1940	Output 1950 (fourth Five Year Plan).	Long-term plan. ¹
Iron	(million tons)	22	15	19.5	50
Steel	" "	28	18.3	25.4	60
Coal	" "	243	166	250	500
Oil	" "	54	31	35.4	60
Grain	" "	131	119	127	180-190
Cotton	" "	3.2	2.7	3.1	—
Electric power	(milliard kw.h.)	75	48.2	82	—
All industries	(milliard roubles in 1926-7 prices)	184	138.5	205	Over 400

All Soviet experience since 1917 has shown that it would be foolish and short-sighted for anyone to interpret these figures as an indication that the U.S.S.R. for years to come will be helpless or unable to protect its interests, impotent in face of any attempt to dictate to it or exclude it from collective leadership in world affairs. Such interpretations have reacted badly for their authors in bygone years, when the U.S.S.R. was far weaker in economic strength or political influence than it is today. But the figures do illustrate what a profound interest the U.S.S.R. continues to have in preserving world peace, and in consolidating for peace purposes its war-time friendship with the other Great Powers.

Molotov made direct allusion to this interest when addressing his electors on 6th February, 1946. After

¹ The levels reached in 1940, except for the last item, are given in the fourth Five Year Plan (or, in the case of electricity, may be calculated from its data). The figures for "all industries" are taken from the third and fourth Plans, and (for the long-term plan) from *Pravda*, 26th October, 1946. For grain, the estimate for the long-term plan is given by T. Khachaturov in *Planovoye Khoziaistvo* (1940), No. 10.

mentioning the need once again to take up the purpose which had to be dropped when Germany attacked in June, 1941, he said: ¹

"Certainly in order finally to accomplish this major task we need a lengthy period of peace and of assured security for our country. The peace-loving policy of the Soviet Union is not some transient phenomenon: it follows from the fundamental interests and essential needs of our people—their desire as quickly as possible to raise their material standards, their tremendous urge to create their own new, cultured Socialist life, and their deep confidence that the Soviet Union will successfully accomplish all these tasks, provided the gang of aggressors is chained up. This is why the Soviet people display such vigilance when possible sources of violation of peace and international security, or intrigues towards that end, are in question."

In this respect, as in many others, it would be most beneficial to Europe if Molotov were understood as meaning precisely what he said, and no more.

¹ *Stalin and Molotov Address their Constituents* (Soviet News, 1946), p. 27.

CHAPTER II

RESOURCES FOR SOVIET PLANNING AND MANAGERIAL INITIATIVE

I. THE BASIS OF SOVIET PLANNING

IN the first chapter it was shown that the aims of Socialist planning in the U.S.S.R. have from the very beginning created a lively and very material interest in tranquil relations with other countries. We must now consider whether the methods by which Soviet plans are carried out—and particularly the methods by which the necessary resources are accumulated—leave any opportunity among those who are in charge of the various branches of economy to develop an interest in foreign adventures.

"Under the new Five Year Plan, centralised capital investment in the national economy will alone exceed 250 milliard roubles. To make such an expenditure possible, we should strengthen and develop Socialist methods of economic management, the regime of economy and thorough cost-accounting, resolutely do away with inefficiency in economic management, over-inflated personnel and high costs of production, and mobilise our internal resources and all sources of accumulation for the needs of the restoration and development of the national economy."

Zhdanov, a secretary of the Communist Party, made this statement in the course of his speech at the anniversary

meeting to celebrate the 1917 Revolution, held in Moscow on 6th November, 1946. It was not a demand for that mechanical, regimented, inelastic obedience to bureaucratic orders, which many still believe to be the method by which fulfilment of the Five Year Plans is secured.

To understand how Soviet plans are really carried out, it is important to bear in mind certain essential elements of the Soviet economic background.

First, there is public ownership of all land, mineral resources and mines, rail, air and practically all road transport, all harbours and most shipping (save for fishermen's private boats), foreign trade and all industries (except for small individual handicraft workers, united for the most part in producers' co-operative societies). Most home trade is also either publicly or co-operatively owned.

Secondly, all State-owned industrial and commercial establishments and organisations are managed on the basis of what may be called "business autonomy" or "cost accounting"—a method of securing the maximum effectiveness of expenditure, in which the basic and working capital are furnished by the State, and the director has freedom of initiative left to him, within the framework of the planned output for the industry, its cost limits and quality standards, and existing labour legislation.

A recent writer says on this subject:

"Cost accounting requires from the business organisations that they should struggle to preserve the resources assigned to them by the State, and to utilise them in the most effective manner. The business organisations bear material cash responsibility for losses which they permit, and receive a material, monetary advantage from their profitable working. This promotes the fulfilment of obligations

to the State in respect of lowering costs of production and increasing accumulation."¹

Thirdly, the greater part of agriculture (nearly 90% of the cultivated area and nearly 85% of the output) is managed by co-operative producers' societies of peasants, called collective farms. These are distinguished from the State farms, which are responsible for nearly all the remainder of agriculture, by being entirely self-owning, except for the land on which they work, and for which they pay no rent: while equipment, stock and produce of the State farms are all State-owned. The collective farms are controlled by management committees, elected by their members. State farms are comparable to factories, in having a manager appointed by the appropriate Government organisation and employing their labour on a wage basis. The collective farms, once they have delivered a part of their produce to the State at fixed prices, have paid their taxes and other dues, and have decided how much to keep in reserve and how much to distribute among the members, can sell the rest of their produce at uncontrolled prices. Their individual members, the collective farmers, once they have satisfied their own household needs out of their share of the produce, can also sell the balance, with the produce from their own household allotment, on the free market.

Fourthly, the efficient working of this system requires—contrary to what is still widely believed abroad—the use of money. The level of production, as we have seen, is not yet sufficient to assure distribution of products according to need. Work must still be the criterion, in order to ensure a constant development of productive forces. The measurement of quantity and quality of work, and of the

¹ Sorokin, *op. cit.*, pp. 81-2.

amount of consumption by each individual, still requires money. So does measurement of the success or otherwise of the managers of industrial and commercial establishments in avoiding waste, reducing costs and so forth. So does the measurement of the comparative efficiency of industries or factories with different levels of technical equipment—*i.e.*, with the production process mechanised to different extents, using different sources of mechanical energy, etc.

Again, the very fact that there are two forms of socially-owned property in the U.S.S.R.—one belonging to the State, the other to co-operative organisations (collective farms)—means that there is still considerable economic difference between the labour of industrial workers and that of collective farmers—the latter being less subject to State regulation—and likewise in the method of disposal of the produce of their labour—part of the collective farmers' produce being disposed of at prices fixed by the law of supply and demand, whereas factory prices at all stages are regulated by the State. In these conditions the planned exchange of the output of State industry for collective farm output of foodstuffs and raw materials also can only be effected with the help of money.

Nevertheless, it must be remembered that money in the U.S.S.R. cannot become capital,¹ *i.e.*, a means of commanding the labour-power of others through investment or holding of securities. There are no shares, stocks or securities in the U.S.S.R., except for the bonds of State loans, issued as an auxiliary means of hastening capital construction of publicly-owned enterprise, and subscribed out of the personal earnings of citizens.

¹ Except in the abnormal circumstances of post-war shortages, in the shape of petty trading capital—and that only for a limited period and with limited scope (see later, Chapter V).

Fifth, the essential purpose of Soviet planning itself is "to attain the most favourable combination of the following elements—expanded consumption by the masses of workers and peasants: expanded reproduction (accumulation) in State industry on the basis of expanded reproduction in national economy as a whole: a rate of development of the national economy more rapid than in the capitalist countries and, in any case, the systematic increasing of the relative importance of the Socialist sector of our economy, which is the decisive and principal element in the entire economic policy of the proletariat."¹ This formula, laid down for the first time at the XV Congress of the C.P.S.U. in December, 1927, as the basis for drawing up the first Five Year Plan, may perhaps be considered outdated in its last section, since "the Socialist sector" is now equivalent to practically the whole of Soviet economy; but in all other respects it still holds good.

Lastly, the economic plans of the U.S.S.R. are the result of the joint effort of Government and the working people. A full and precise description in English has been given by Professor J. Joffe, a member of the Staff of the State Planning Commission. The following quotations sum up its essential points:²

(i) "Work on drawing up the annual plans usually begins six or seven months before the new year. On the basis of data submitted by the People's Commissariats" (now Ministries: A.R.) "and the State Planning Commission, the Government sums up the results of plan fulfilment for the current year."

(ii) "The Government also determines the chief tasks that must be carried out in the next few years. These tasks are formulated in the Instructions"

¹ *Rezoliutsii i Postanovleniia XV Syezda VKP* (1929), p. 47.

² *USSR Speaks for Itself* (1943), pp. 64-73.

(sometimes called "Directives": A.R.) "for drawing up plans. . . . In the Instructions for drawing up plans the Government indicates the key problems for the period covered by the plan, specifies the industries that will play a decisive part in fulfilling the plan, and formulates their basic tasks."

(iii) "The plan fulfilment of all other branches of industry is regarded from the standpoint of the extent to which they ensure the fulfilment of the plan for the key industry. . . . When the People's Commissariats receive the government instructions for drawing up their plans, they proceed to determine the preliminary programmes of each of the industries under their jurisdiction. The chief administration of the given industry defines the plan for each establishment under its control."

(iv) "These preliminary plans are then discussed by both the management and the trade union, as well as other public organisations, of the establishment. At their production conferences the workers, both manual and clerical . . . make amendments to the proposed plan based on the specific nature and potential capacity of the given establishment."

(v) "All these plans, with additions and amendments, are then returned to the appropriate People's Commissariat, which, after due examination, draws up a single uniform plan for the whole Commissariat and submits it to the Government for approval. . . . All plans submitted to the Government for endorsement are first of all studied by the State Planning Commission which submits its opinion on each of these plans."

(vi) "The plan adopted by the Government becomes law" (except for the Five Year Plan, which has to be submitted to, and adopted by, the Supreme Soviet of the U.S.S.R., i.e., Parliament: A.R.).

(viii) "The Government organises constant control over plan fulfilment, thus ensuring the timely carrying out of the plan. But this control is not the function of

State organs alone. The working people themselves take part in it. Figures on plan fulfilment in the key industries are published in the newspapers daily and are thus available to the general public." (In 1947 a system of publishing monthly and elaborate quarterly reports was begun: A.R.)

What, in the light of these essentials, was the purpose of the fourth Five Year Plan? Its aim, first, was to replace the capital which was destroyed by the Germans, and which was valued in the Report of the State Commission quoted earlier at a total of 679 milliard roubles, i.e., 128 billion dollars, or two-thirds of all national property situated in occupied territory. According to Voznesensky,¹ the total basic capital of the U.S.S.R. in 1940 was 1046 milliard roubles. While part of this frightful damage was to be made good by current production, and a very small proportion, possibly, out of reparations from Germany,² the State was to spend 115 milliards out of its own resources for the purpose—a figure which explains to some extent why Stalin in October, 1946, said that repairing all the devastation would take longer than five years.

Next, about 135 milliard roubles of State capital resources were to be spent on the expansion of national economy outside the devastated areas. What this meant in tangible things can be expressed in the following way. During 1929–32, the period of the first Five Year Plan, 2400 new factories and other economic enterprises were built or completely reconstructed; in 1933–37 about 4500 such plants were constructed and set going; during the three years 1938–40 the number was 3000; and during the period of the new Plan, ending in 1950, the number was to be 5900.

¹ *Report on the Five Year Plan* (London, 1946), pp. 9, 28.

² Voznesensky, in *Voyennaya Ekonomika SSSR*, states (p. 163) that the total value of industrial equipment received from Germany as reparations amounted to 0.6% of property destroyed.

As a result of these measures industrial output over the whole Union was to increase by 48% compared with the pre-war level (in the devastated areas, the increase was planned at 15%), and productivity of labour was to go up by an average of 36%. Agricultural output was to be 25% above the pre-war level. Average annual earnings were to increase to 48% above the pre-war level, there was to be a big increase in expenditure on education and cultural services of every kind, and rationing was once again to be abolished.¹

In order to make possible these vast changes, the Soviet Union had to find the resources mainly out of its own accumulation. It had no access to foreign loans, and could not reckon on them. While in the past it had had modest credits for industrial purchases from various countries, such facilities after the war were neither promised on a very large scale nor, so far as could be anticipated in 1947, available (except for acquiring the undelivered balance of goods ordered in the U.S.A. during the war).

It was out of the national income that the resources had to be taken; and the operation was possible precisely because the means of production of the national income in the U.S.S.R. are the property of the community which provides the labour to work those means of production. From the beginning of Soviet planning a high percentage of the national income has been deliberately set aside for this purpose; and, although the proportion has remained roughly the same, the rapid expansion of the national income itself—made possible just because the economies were being used in a planned fashion, for the purposes laid down in 1927—has meant that the amounts used have also greatly increased.

¹ *Law on the Five Year Plan* (London, 1946), *passim*.

The relevant figures are: ¹

Year.	National income (milliard roubles).	Share appropriated for capital accumulation and reserves.
1928	25.4	29.7%
1932	45.5	26.9%
1937	96.3	27.1%
1940	128.3	29.6%
1950	177	27%

It should be noted that the U.S.S.R. is in a much less favourable position than was Tsarist Russia in respect of assistance from foreign capital. Out of the total of 5 milliard roubles (over £500 million) constituting the capital of Russian industry in 1917, just over one-third represented foreign investments. On the other hand, the influx of foreign capital did not aim at promoting a balanced development of Russian economy, but had been governed, of course, by the prospects of a high rate of profit. As a result, foreign companies controlled about 50% of all Russia's coal output and 80% of her coke output, over 60% of her iron-ore output and much the same proportion of her copper output, 67% of all output of pig-iron in the main metallurgical industry (in the south) and just over half all output of oil. More than half the capital of the six leading banks of the Russian Empire was also foreign.² Thus the annual increment of Russian basic industry in the main flowed out of Russian economy into that of the investing countries. What the Soviet Union has lost in the way of foreign assistance for political reasons, it has therefore more than gained in ability to direct the fruits of its national labour as its economic interests dictated.

¹ Figures for 1928 are taken from the Gosplan *Kontrolnye Tzifry na 1929-30*, p. 467; for 1932 and 1937 from *Dohody Gosudarstvennogo Budzheta SSSR* (1945), p. 8; for 1940, from *USSR Speaks for Itself*, p. 24; and for 1950, from Voznesensky, *op. cit.*, pp. 22-3.

² P. Ol, *Inostrannye Kapitaly v. Rossii* (1922), *passim*.

2. ACCUMULATION IN SOVIET ECONOMY

Through what channels do these fruits of its labour come, and by what means does the Soviet Union ensure that the accumulation takes place? The channels remain roughly what they were when Stalin, at the very beginning of the planned process of industrialisation, spoke about the sources from which accumulation could arise. After referring to the expropriation of the landlords and capitalists as a result of the Revolution, he went on:

"I could say that our nationalised industry, which has been restored, which is developing and is now producing a certain amount of profit necessary for the further development of industry, is another source of accumulation.

"I could point to our nationalised foreign trade, which provides a certain amount of profit and therefore represents a source of accumulation.

"I could refer also to the more or less organised home trade which provides some profit, and therefore also represents a source of accumulation.

"I could point to such a lever of accumulation as our banking system, which gives some profit and, so far as it is able, feeds our industry.

"Finally, we have an instrument like the State, which draws up the national Budget and which collects a fair amount of money for the further development of our national economy generally, and our industry in particular.

"These, in the main, are the principal sources of our internal accumulation."¹

In general, what Stalin said in 1926 holds good today. But in order that these sources of accumulation should

¹ Report on Plenum of the Central Committee of the G.P.S.U., 13th April, 1926 (in *Ekonomicheskoe Polozhenie Sovetskogo Soyuza*, 1926, pp. 9-10).

really provide what is expected of them, the channels through which the accumulation has to pass into the hands of the community have to be clearly defined; and this in turn reveals the immense responsibility which falls upon the individual manager in Soviet economy, and the large opportunities which he has for displaying initiative and resourcefulness.

The main channels are three in number. The first and smallest is through the depreciation charges in industry. At the beginning of the process of accumulation—from 1922 until 1925—when industry was struggling up out of the ruin in which it was left by six years of war, depreciation charges provided the bulk of the resources needed for new construction: 592 million roubles, out of a total expenditure on new constructive works of 714 million roubles. Only in the economic year 1925-26 did accumulation coming from profits in industry outstrip in importance the accumulation from depreciation charges. The second source, which took the lead from that year so far as Soviet industry itself was concerned, was the profits of State economy. By the eve of the first Five Year Plan (1927-28) two-thirds of industrial accumulation (800 million roubles out of 1223 million roubles) came from this source. But from 1925-26 onwards the financing of industrial construction out of the general State Budget, as a particular source of accumulation, outstripped in importance what was set aside within industry itself. In 1925-26 the budgetary accumulation exceeded internal industrial accumulation by 105 million roubles, while by the second year of the original Five Year Plan the difference was already more than 1000 million roubles.¹ In subsequent years, the most decisive in the

¹ Buzyrev, *Vosstanovitelnye Raboty i ih Finansirovanie* (1945), pp. 29-30.

history of Soviet economy, the relative importance of these two sources was as follows: ¹

Source of accumulation.	1929-32.	1933-37.
By economic organisations . . .	30%	23.2%
From the State Budget . . .	70%	76.8%

What this system implies, and the responsibility it creates for individual initiative, were already indicated by the XV Conference of the C.P.S.U. (26th October-3rd November, 1926), in a resolution which gave directions for the first steps in "reconstructing Soviet economy on the basis of a new and higher technique", with the rapid increase of the industrial equipment of the country as its leading feature. In fact the resolution prepared the way for the decision (already mentioned) of the XV Party Congress,² a year later (2nd-19th December, 1927), which laid down elaborate directives for the first Five Year Plan. The Conference of November, 1926, declared: ³

"The rate of expansion of basic capital will depend (a) on the dimensions of accumulation by socialised industry, (b) on the utilisation through the State Budget of the incomes of other branches of national economy, (c) on making use of the savings of the population by drawing them into the co-operative movement, the savings banks, internal State loans, the credit system, etc.

"The process of expanded reproduction in industry must be assured first and foremost by investing in industry the new quantities of surplus product created within industry itself. The principal condi-

¹ Rovinsky, *Gosudarstvenny Biudzhet SSSR* (1944), p. 10.

² A Congress of the Communist Party of the Soviet Union is the supreme authority of the party on policy, election of the Central Committee and so forth. A Conference is an advisory delegate meeting, and its decisions are subject to endorsement by the Central Committee.

³ *XV Konferentsia VKP* (b) (1927), pp. 776-7.

tions for increasing the size of accumulation within industry itself are a resolute reduction of overhead charges, a speeding-up of the turnover of funds, rationalisation of industry in every possible way, the application of latest technical improvements, the raising of the productivity of labour and of labour discipline.

"Nevertheless, whatever the increase of accumulation within industry, it cannot be sufficient, at all events in the period immediately ahead, to ensure the necessary rate of development of industry.

"Therefore the further development of industry must to a considerable degree depend on those supplementary sources which are directed into industrial construction.

"One of the principal implements for redistributing the national income is the State Budget. In the State Budget of the Union, the interests of the industrialisation of the country must find their full expression. The expenditure side of the Budget must provide adequate funds for industry, electrification, etc.

"The interests of industrialisation must also be taken into account, above all others, in drawing up the plan of exports and imports (by increasing imports of the means of production and reducing imports of consumption goods). . . .

"The industrialisation of the country cannot be effected without a strict and unwavering application of economies. The attention of the whole Party and of all Soviet institutions must be directed towards putting an end to every unnecessary and unproductive expenditure."

The XV Congress of December, 1927, applying these principles, proclaimed in its "directives for drawing up the Five Year Plan of national economy" that reducing the costs of production was "the central problem of

industry, and all other tasks must be subordinated to solving that problem". The chief method of solving it was "the Socialist rationalisation of production—the introduction of new equipment, the improvement of the organisation of labour, the raising of the skill of the workers and, while shortening the working day, utilising it to the maximum".¹

In the following pages an attempt will be made to show what the application of this programme has meant in concrete terms during the twenty years that have passed since the XV Congress of the C.P.S.U., and, more particularly, what it has meant for the men and women bearing responsibility for Soviet industry, trade or finance, from the charge-hand and shop foreman to the director of a great enterprise and the Minister in charge of an entire branch of industry or trade. As far as possible, the examples are taken from the most recent materials available. The reader must constantly bear in mind that never before in the history of the world have men and women had to manage a vast network of factories, trading organisations and credit institutions which were not private property, but belonged to the nation as a whole.

Here it is relevant to point out that the Soviet leaders have always emphasised the rôle of the individual in making plans real—not merely in the sense of their fulfilment, but also in their very drafting. In the discussion at the VIII Congress of Soviets, in December, 1920, at which the first plan of economic reconstruction was being discussed, Lenin had compared it with a "second Party programme", adding: "Of course, it will be a plan adopted only as a first approach. This Party programme will not be as unalterable as our real programme, which is subject to alteration only at Party congresses. No,

¹ *Rezoliutsii*, etc., pp. 58-9.

this programme will daily, in every workshop, in every rural district, be improved, made more detailed, perfected and varied." Quoting these remarks at the XVI Congress of the C.P.S.U. in 1930, Stalin applied them to the Five Year Plan which had been adopted the previous year. He said: ¹

"No Five Year Plan can take into account all the possibilities which lie concealed in the heart of our social system, and which become revealed only in the course of work, in the process of applying the plan in the factory, the works, the collective farm, the State farm, the district, etc. Only bureaucrats can imagine that the work of planning is *concluded* with the compilation of a plan. The compilation of a plan is only *the beginning of planning*. Real planned guidance develops only after the compilation of the plan, after its testing on the spot, in the course of its application, its correction and rendering more exact."

The following year, at a conference of responsible workers in Soviet business organisations (23rd June, 1931), Stalin dwelt still more emphatically on the rôle of the individual in a society genuinely Socialist, *i.e.*, where no capitalist class existed, and where responsibility fell entirely on the working people. He said: ²

"It would be foolish to think that the production plan is a mere enumeration of figures and assignments. Actually the production plan is the embodiment of the living and practical activity of millions of people. What makes our production plan real is the millions of working people who are creating a new life. What makes our plan real is the living people, it is you and I, our will to work, our readiness to work in the new way, our determination to carry out the plan."

¹ *Political Report to the XVI Congress* (London, 1930), pp. 142, 143.

² *Leninism* (1944, English edition), p. 387.

Fifteen years later, at the Supreme Soviet session which adopted the fourth Five Year Plan, the ultimate responsibility for its shape as well as for its fulfilment was still being placed upon the individual citizen. N. Voznesensky, the chairman of the State Planning Commission, said in closing the debate:¹

"In addition to the Five Year Plan under consideration at this session of the Supreme Soviet of the U.S.S.R., we shall also have the annual State plans of development of the national economy, which will be expanding it from year to year. I can say with confidence that if, in any particular branches of the national economy, the five year plan of capital construction is carried out ahead of time—and that we are all striving for—additional capital investments will be provided for such branches of national economy, to promote the over-fulfilment of the Five Year Plan.

"All we deputies of the Supreme Soviet of the U.S.S.R. will in our daily activities apply ourselves to the task of extending the Socialist emulation of the workers, peasants and intellectuals, of all factories, towns and villages, for the fulfilment and over-fulfilment of the new Stalin Five Year Plan."

Moreover, in Soviet economy the working out and improvement of the plan in this way are inevitably bound up with active supervision by the workers themselves, in a way so far found impossible where ownership is in private hands, however well-meaning and enlightened. Of many remarks by Soviet leaders on this question (to be further examined in Chapter III), the following, made by Stalin in a discussion at the Central Committee of the C.P.S.U. in February–March, 1937, is a typical example:

¹ *Zasedania Verh. Soveta SSSR, I Sessia* (1946), pp. 245, 315.

"What does proper management mean? It does not at all mean sitting in an office and scribbling instructions. Proper management means:

"First, finding the correct solution for the problem—and the correct solution cannot be found without taking into account the experience of the masses, who test the results of our management on their own backs:

"Secondly, organising the putting into effect of the correct solution—which cannot be done, however, without direct assistance from the masses:

"Thirdly, organising the checking of fulfilment of that solution—which again cannot be done without the direct help of the masses."

3. COSTS, PROFITS AND FACTORY MANAGEMENT

Coming now to the first of several channels of accumulation in Soviet economy—depreciation charges—it must be noted that these vary from industry to industry, according to the average rate at which the equipment and buildings used in the industry can be expected to wear out. The Soviet Government in January, 1938, established a detailed scale of depreciation charges, varying from 5.5% in the case of the medium engineering industry and light industry to 6% in the case of the timber and food industries.¹ The departments concerned had the duty of varying the percentage fixed for their industry among the factories under their control. Part of the amounts set aside in this way (they were 6.3 milliard roubles—one-tenth of total investments—during the first Five Year Plan, and 20.3 milliard roubles—over one-seventh of total investments—during the second) is kept at the State Bank in current accounts, for the purpose of financing major repairs to buildings and equipment in the industry

¹ Buzzyrev, *Vosstanovitelnye Raboty i ih Finansirovanie* (Moscow, 1945), pp. 61–2.

concerned. But a considerable part is deposited in the long-term credit banks which exist in the U.S.S.R. to finance plans of construction provided under the Five Year Plans. Thus this part of the depreciation charges passes out of the particular industry and into the disposal of the whole community for general economic development.

Naturally this provides a means of measuring efficiency: depreciation is part of the prime costs of production. At one time the average figures were very considerably exceeded—in the years when, to meet the needs of its gigantic reconstruction programme, the Soviet Government was giving employment to millions of previously unskilled workers fresh from the villages: the period which saw the complete and permanent elimination of unemployment in the U.S.S.R. (1930). Stalin said of this period: ¹

“We frankly and deliberately accepted the inevitable costs and excess expenditure, connected with the lack of technically trained people able to handle machines. True, we had not a few machines smashed up during this period. But in return we gained what was most precious—time—and we created the most valuable thing in economic affairs—skilled labour. . . . Costs and excess expenditure, broken machines and other losses, repaid themselves lavishly.”

But, once this initial period was left behind, in the course of the first Five Year Plan, and the Soviet Union had acquired in the space of a few years many millions of trained industrial workers, both men and women, the depreciation charges on industry became a certain

¹ Speech at reception to metallurgical workers, 26th December, 1934 (*O Sotzialisticheskomo Sorevnovanii*, 1941, p. 192).

stimulus to making the best possible use of existing equipment. The amount of the charge is fixed as a definite percentage of the *original* costs of the equipment and buildings; hence the most effective use of the latter to produce a maximum of output means that the depreciation charge per unit of output falls, and therefore (to that extent) the cost of production is reduced. A reduction of the cost of production is one of the principal tests by which a good manager is judged in the U.S.S.R., and for which he and the workers concerned receive material benefits.

This is one of the stages of Soviet production at which the rôle of the individual comes into play. The use to the utmost extent of existing equipment, the employment of technical devices which reduce the rate at which machinery wears out, timely repairs both to buildings and equipment—these factors are of considerable importance in making less burdensome the cost of depreciation charges on each unit of production. Failure to make use of all possible opportunities for reducing such charges is a frequent subject of public criticism.

Thus, at the last Conference of the C.P.S.U. before the Nazi attack, held in February, 1941, Malenkov (one of the secretaries of the C.P.S.U.) reported that on 1st November, 1940, about 70,000 machine-tools in Soviet factories were not working on that particular day, and 46,000 which had been delivered to factories by the manufacturing organisations had not been installed.¹ This meant, of course, that there was so much less productive capacity on that day in the factories concerned, with a consequent loss of opportunities to reduce the burden of depreciation charges. Again, the Ivanovo Regional

¹ Voznesensky, “Economic Plan for 1941” (in *U.S.S.R. Speaks for Itself*, 1943, p. 31).

Committee of the C.P.S.U. calculated in the course of the war that the elimination of hold-ups in the use of equipment at the textile factories in this region (known as the "Soviet Lancashire") would have made possible an increase in output by over 43 million yards of cotton goods in 1944.¹ At the discussions on the 1946 Budget in the Supreme Soviet of the U.S.S.R. in October, 1946, the chairman of the Budget Commission of the Soviet of the Union, the Ukrainian leader L. P. Kornietz, pointed out that in the first half of the year the coal mines of the western regions of the U.S.S.R. had made use of their coal-cutting machines only to the extent of 70%, and of pneumatic hammers only 64.5%; as a result, the cost of production of one ton of coal in these regions had exceeded planned costs by 2.34 roubles. Similar causes had led to excess over planned costs by 1.81 roubles per ton in the eastern coalfields.² In the Donetsk coalfield (where the destruction of material was particularly terrible, and the losses of skilled man-power during the war very heavy) about 30% of the coal-cutting machines were idle at the end of 1946, 22% of the conveyor beltings and 26% of the electric trucks.³

It is easy to see what a difference the fullest possible use of the equipment provided could make, both to total output and to costs per unit of output, were the machinery involved in these cases used to the full. The Soviet Press gives many examples of the successes won by plants where these lessons have been adequately learned. Thus, at the Voroshilovgrad locomotive works, in September, 1946, the costs of production per unit were lowered by 13% compared with what was allowed under the plan, mainly

¹ Kozlov, *Khoziaistvenny Raschet v Sotzialisticheskome Obschestve* (1945), p. 30.

² *Pravda*, 17th October, 1946.

³ *Ibid.*, 3rd March, 1947.

by the better equipment and fullest possible use of existing machine-tools and presses. As a result, the building of a locomotive cost 50,000 roubles less in September than was provided under the plan. In October the successes were carried farther. The result was achieved both by better technical plans on the part of the management, and by the efforts of many hundreds of workers to over-fulfil the production plan and raise productivity of labour by the best possible use of existing machinery: in fact, the plan in this respect had been exceeded by 3% in September, and one locomotive had been turned out in excess of the plan.¹ In the Donbas itself, one coal-cutting operator, Gerasim Zaporozhietz, raised the output of his machine to 14,000 tons a month, by proper arrangements for its full use; and another, Fedor Zhideyev, in January, 1947, reached an output of 16,000 tons in the same way.²

Again, war-time experience in mass production of armaments and equipment for armaments factories has shown the possibility of employing machinery to the full by better attention to the manufacture of spare parts. The Stalin works at Novo-Kramatorsk, which was not itself a mass-production plant, nevertheless did much, when the war ended, to take full advantage of this war-time experience, thanks to the work of its technicians and engineers. They managed to standardise output of a number of the more difficult parts, such as oiling systems, pumps, coupling-boxes and shafts; to arrange their mass production; and consequently to reduce the time required for re-setting machine-tools. As a result, the time taken by the process of manufacturing this works' speciality was cut to one-fifth, and similar methods employed in its tool department cut the duration of the process there to less than one-third.

¹ *Pravda*, 31st October, 1946.

² *Ibid.*, 3rd March, 1947.

As we have seen, however, the larger source of accumulation inside industry is from the profits of its working. These, like the turnover tax, are part of the "surplus product" of socially-owned industry. They represent the difference between the costs of production and the prices, fixed by the State beforehand, at which the factory concerned sells its output to other State-owned organisations. The fact that the selling price is planned by the State, and not left to the uncontrolled effect of a free market, is of great importance: it means that enterprises which show no profits, either because they are in the stage described by Stalin earlier or because in the nature of things they are not profit-making concerns, are not necessarily unimportant to the community, and therefore are not penalised by the State.

Profits of industry, like depreciation charges, are not used solely or mainly for the industry concerned. The larger portion is deducted for use by the State (through either the Union or local budgets) to promote the development of other branches of national economy. The amount reserved inside the industry goes in the main to finance new capital construction (through the long-term credit bank for industry); but part of it is retained by the enterprise itself, to increase its working resources, and to give larger scope to the director in improving the quantity and quality of his output: thus constituting what is called the "director's fund". This is an amount, equivalent to 10% of the total planned profit in iron, steel, coal, oil, ore-mining and some chemical works, 4% in other heavy industries, and 2% in the food and light industries: with 25-75% of all profit secured in excess of plan.¹ Half of it is earmarked for expenditure on bonuses and welfare improvements, and half for expanding production and

¹ *V Pomoshch Fabzavmeshtkomam*, No. 2, February, 1947.

extra house-building for the workers of the particular factory, above what the general housing programme provides—always on condition that in respect of quantities of output, costs of production and profits the factory is fulfilling the State plan.

In war-time the amounts retained by the individual industries fell considerably, owing to the immense needs of war-time expansion of industry, and the "director's fund" was temporarily suspended; but it was restored in July, 1946.

An idea of the proportion of profit retained by the individual industries can be formed from the following table, applying to all State enterprise in industry, transport, trade and agriculture:

Year.	Total profit. ¹	Retained by industry.
1940	33.3 milliard roubles	11.6 milliard roubles
1943	21.7 " "	1.8 " "
1944	24.4 " "	— " "
1945	18.9 " "	2.0 " "
1946	22.1 " "	5.9 " "
1947 (plan)	24.1 " "	5.4 " "

It can hardly be over-emphasised that this source of accumulation, which links up the general interest with the particular, is a constant incentive to the enterprising and ingenious factory manager and to all his subordinates. Every increase of output over and above the planned amount—providing also that there is no exceeding of the planned costs of production, or lowering of the standards of quality laid down, and of course providing that the labour laws, which are under constant supervision by the

¹ The figures for 1940 were given by the Minister of Finance at the VI Session of the Supreme Soviet (*Report*, p. 66): those for 1943 in the stenographic report of the X Session of the Supreme Soviet (28/1-1/2, 1944), pp. 22-3; those for 1944 in the report of the XI Session (April, 1945), pp. 8, 11, and in Kozlov, *op. cit.*, p. 56; for 1946 and 1947 they were given by the Minister of Finance (*Pravda*, 21st February, 1947).

works committee of the trade union concerned, are observed—means both increased contributions to the State fund for developing national economy and improved material rewards for the personnel concerned.

It would certainly be nonsense to suggest that the system is always successful. Yet very great increases of production in these conditions have been obtained. Improvement of the lay-out and technique of production, introduction of mechanised processes, elimination of waste in the use of raw materials and power, establishment of auxiliary workshops to produce parts which previously had to be supplied from a long way off—these and similar causes, for example, explain an immense increase in the production of many Soviet factories during the war and since. At one aircraft factory the output of fuselages was increased threefold by a reorganisation of the production process, and productivity of labour fourfold.¹ The Tula engineering works of the Ministry of Railways completed its year's quota of output in 1946 by 25th November, and although it had had to begin the manufacture of ten new types of machinery during the period, it not only accumulated a substantial profit, but lowered costs of production by 4.5%. Labour productivity considerably exceeded the plan. At another large works—the combined fodder plant at Chkalov—the year's programme of output was completed in 1946 by 26th November, with an economy of 1.8 million roubles, a lowering of costs of production by 12%, and a considerable speeding-up in turning round railway wagons with the finished products. These two notices, selected at random from hundreds appearing in the news columns of the Soviet Press, appeared in *Pravda* of 28th November, 1946.

¹ Lokshin, *Partia Bolshevikov v Borbe za Industrializatsiu SSSR* (1946), p. 97.

At the same time, the Soviet Press constantly publishes examples of how inattention to opportunities for increasing output without increasing costs or reducing quality leads in fact to failure to produce the output quota planned. Thus at the Supreme Soviet session on 15th October, 1946, the Minister of Finance of the U.S.S.R., Zverev, sharply criticised the working of Soviet textile factories; and in his contribution to the debate Sedin, Minister for the Textile Industry, acknowledged the truth of the criticism. The industry in 1945 had contributed to the State Budget 406 million roubles less than was planned, 50% of this sum being accounted for by excessive costs of production, and the rest by such defects as insufficient expenditure on housing for its workers, unnecessarily writing off bad debts, etc. In 1946 the financial position of the industry, by greater attention to these matters, began rapidly to improve from month to month, and by the third quarter of the year it had begun to wipe out its debt. At the same time it completed its programme of output in the second and third quarters of 1946 for the first time since the war, it reduced costs of production to below the planned amount, economising nearly 24 million roubles under this heading alone, and by the efforts of its workers it had succeeded in starting an additional 100,000 spindles and 4500 looms above plan.

It is interesting to note that the textile industry was one of the large group which, in 1946, not only considerably increased its output in comparison with 1945 (cotton fabrics by 17% and woollen fabrics by 30%), but over-fulfilled its plan for the year, in spite of the bad start, by 3%.¹

¹ Communiqué of the State Planning Commission on Fulfilment of the 1946 State Plan (*Soviet News*, 22nd January, 1947). In 1947 it again overfulfilled its year's plan by 3% (*Soviet Monitor*, 18th January, 1948).

A considerable part in the effort of Soviet managements to raise the amount of profit within the framework of planned costs and labour conditions is played by what is called "mobilisation of internal resources". Many plants, and particularly building jobs, tend to accumulate excess stores of materials. On the basis of a technically determined quantity of stocks per day, building jobs are supposed to have in reserve not more than sixty days' stock of materials and equipment and forty days' stock of iron and steel. In the course of the worst years of the war, 1942 and 1943, 3 milliard roubles of economies were effected by the building industry (which constructed vast numbers of factories in those years) solely by its managers "unfreezing" excess quantities of such stores. It is important to notice in this connection that, in Soviet conditions, there is no need for managers to anticipate a possible rise in prices of materials as elsewhere, and only technological considerations should govern their plans. Excess stocks temporarily fall out of the production cycle, thereby both interfering with State plans of output and reducing the volume of accumulation.

Speakers at the Budget debates in October, 1946, gave a number of examples of such wasteful piling up of stocks, and pointed to the great opportunities which managers had in this connection. Unnecessary stocks on 1st July, 1946, in undertakings belonging to the Ministry of Agricultural Engineering (said the Minister of Finance) amounted to nearly one milliard roubles, in those of the textile industry over 300 million roubles, and in the chemical industry to 170 million roubles. Kornietz, in the speech already quoted, pointed out that plants of the Ministry for the Iron and Steel Industry had allowed stocks to rise by the same date to over 300 million roubles above the permitted total—instead of

reducing them, as they were instructed, by 70 million roubles.¹

4. CONTROL BY BANK AND BUDGET

In the criticism of such defects responsibility is placed not only upon the managers concerned, but also upon the State Bank. "Bank workers, and particularly the credit machinery of the State Bank, must carefully study the condition of the working resources in the various branches of national economy," said Zverev in the same speech, "and discover in good time those cases where the working resources are out of proportion to the real economic requirements."

This aspect is also important. The financing of the entire process of Soviet production takes place under strict "rouble control", as it is called, *i.e.*, supervision by the banking machinery.

Where it is a case of new enterprises being built in accordance with the State plan—in other words, where long-term investment of State resources is taking place—the amounts involved are held by the various long-term credit banks (for industry, agriculture, trade or municipal enterprise), and they must issue to the building jobs concerned, quarter by quarter, the sums needed for purchase of materials, payment of labour and service, etc. But they must only do this on receiving satisfactory evidence that the work is proceeding according to plan.

Where it is a case of the working resources of enterprises which are already operating, the funds necessary to finance *part* of the normal or planned reserves at any given moment (both in materials and in cash), and those required for financing *all* seasonal variations in stocks of

¹ *Pravda*, 16th and 17th October, 1946.

raw materials and finished goods, transport, extra labour, etc.—over and above the normal amounts—are supplied on short-term credit by the State Bank. The local branches of the State Bank (there were over 4000 of them before the war) must exercise the same supervision as the long-term credit banks. In January, 1939, 65% of the resources of the State Bank represented short-term credits of this kind to industry, and to the wholesale and retail trade carried on by industry.

It can therefore be seen what a powerful lever of control, supplementary to that exercised from above by the Ministry concerned—and from below, we may say in anticipation, by the workers directly involved—rests in the hands of the Soviet banking machinery. In practice, this means that tens of thousands of bank workers, as well as hundreds of thousands of factory managers and more responsible subordinates, have their hands full, and their individual abilities and initiative taxed, at least as much as in other countries, in increasing accumulation, and thus making Socialist planning possible.

The importance of reducing costs of production, as part of this process, has already been mentioned. The basic condition for a Soviet enterprise showing profit, indeed, is fulfilment of the plan for reducing costs; and the majority of Soviet enterprises do in fact fulfil the plan in this respect. The importance of this will be particularly clear from the fact that “the total economies effected by reducing production costs in the period 1946–50 in industry, transport, State-owned machine and tractor stations and State farms should amount to some 160 milliard roubles as compared with 1945.”¹ This sum may mean little to the British reader, at first sight. But it should be compared with the 250 milliards which the same Five

¹ Voznesensky, *Report on the Five Year Plan* (1946), p. 22.

Year Plan provided for reconstruction and new building of enterprises during the five years—remembering that this meant building or reconstructing 5900 of the largest modern factories, mines, shipyards, railways, harbours, State farms and so forth. The tremendous importance of the economy required will then be manifest: since it represented over 60% of the total investments for these purposes allotted by the Plan.

It is not surprising that, in order to increase the feeling of responsibility for fulfilling plans in respect of lowered costs of industrial output, the Soviet Cabinet in 1946 decided that the granting of special rewards to managers and technicians of industrial enterprises, for fulfilment and over-fulfilment of production plans, should take place only when works accounting had established that there had also been a planned reduction of costs.¹

In this respect war experience in the U.S.S.R. was encouraging. Costs of production in State-owned industry were reduced by 6.9% in 1941, 5.9% in 1942, 2.5% in 1943² and 3% in 1944. In the latter year costs were reduced by 7.3% in the aircraft industry, as compared with 1943, by 12.8% in the tank industry, by 7.6% in the armaments industry, by 9.8% in the machine-tool industry, and so forth. Total economies during the three-and-a-half years of war secured by reduction of costs in comparable branches of industry amounted to 50 milliard roubles³—no small amount, by comparison with the 103 milliards invested in capital construction during 1944 and 1945.

Furthermore, the lowering of costs of production is

¹ Report by Zverev, Minister of Finance, at Supreme Soviet (*Pravda*, 16th October, 1946).

² Voznesensky, *Voyennaya Ekonomika SSSR* (1947), p. 134.

³ Report by Zverev on 24th April, 1945 (*XI Sessia Verhovnogo Soveta SSSR*, pp. 8, 11).

presented in the speeches and writings of Soviet statesmen and economists as an objective of struggle, of combat, for the individual citizen at his place of work, and particularly, of course, for the manager. This is the more important because in the U.S.S.R. there is no contradiction between the economic function of wages earned by the individual and that of the surplus product, or net increment, which he produces by his efforts. The surplus product passes into the hands of society as a whole, to be used for purposes which it determines very largely with the help of the individual worker—as will be seen later. Accumulation by society, in these conditions, is literally (and not merely as a figure of speech used by economists) only “deferred consumption” by society.

This explains why in Soviet economy reduction of costs is generally accompanied by increasing of wages. Thus, under the third Five Year Plan, adopted in 1939 for the period 1938–42, the economies to be realised by raising productivity of labour were to amount by 1942 to nearly 20 milliard roubles, of which over 15 milliards were earmarked for wage increases, and the rest for lowering costs of production. Again, in 1941 an average wage increase per worker of 6.5% was planned, *simultaneously* with a decrease in wages costs per unit of production of 4.9%.¹ In the fourth Five Year Plan costs of production in industry were to decrease by 17%, and in rail transport by 18%, while average annual earnings were also to increase substantially, with a 30% rise in the national income.

Only with these broad tendencies in mind can the constant drive for reduction in costs of production of Soviet industry be seen in its true perspective. At the Budget debates of October, 1946, the chairman of the

¹ Kozlov, *Khoziaistvenny Raschet v Sotsialisticheskoy Obshchestve* (1945), pp. 40–1.

Budget Commission in the Soviet of Nationalities, I. S. Khokhlov, referred to the successes of the building materials industry, which had been sharply criticised the year before for failure to carry out its plan and for increasing costs by 2.6%. As a result, he said, there had been a definite improvement from the second quarter of 1946, when the quarter's plan had been over-fulfilled by 14.5%, with a reduction in costs of 12.9%. The third quarter's programme had also been satisfactorily fulfilled.¹ A communiqué of the State Planning Commission published in January, 1947, on the degree of fulfilment of the 1946 plan, shows the building materials industry as having over-fulfilled its plan for the year by 5%.²

Again, in the Budget debates of February, 1947, Khokhlov drew attention to the consequences of good and bad management in a number of industries. Thus the textile industry, he pointed out, had had a good overall outcome of its year's working: the relevant figures have been quoted earlier. But there were considerable variations within it. The Pavlovo-Pokrovsk factory had increased its output in 1946 by 44% over the previous year, and lowered costs of production by 1.75% more than had been planned, over-fulfilling its production plan for 1946 by 7.4% as a result. But a nearby group of textile mills at Glukhov had reduced output in comparison with 1945, under-fulfilling its plan by 5.8%, and by increasing costs over 5% had ended the year with a big deficit. A great deal still needed to be done, concluded Khokhlov, to “mobilise the reserves existing in industry” by pulling the backward factories up to the level of those more advanced.³

¹ *Pravda*, 17th October, 1946.

² *Soviet News*, 22nd January, 1947. In 1947 the industry over-fulfilled its year's plan by 1% (*Soviet Monitor*, 18th January, 1948).

³ *Izvestia*, 22nd February, 1947.

Almost every day, towards the end of the year, the Soviet Press reported the achievements of Soviet factories in this respect. The success of the Voroshilovgrad locomotive works has already been mentioned. The Shcherbakov leather factory at Yaroslavl, by taking better economy measures and utilising its internal resources better, reduced costs by 10.4% in one month.¹ The Kuznetsk iron and steel works at Kemcovo, in Siberia, not only produced in ten months of 1946 more iron and steel than they had pledged themselves to turn out in twelve months (and that was more than the State plan), but by reducing costs had economised 26 million roubles in ten months.

In this case, as in others, it was not only the management which secured these results. The many thousands of workers of the Kuznetsk works had pledged themselves to secure them by competing with each other in friendly rivalry; and the Council of Ministers of the U.S.S.R. awarded a red banner to the works, with challenge banners to its blast-furnace, rail and open-hearth shops—the usual distinctions for success in Socialist emulation.

Turning now to the budgetary source of accumulation, we find one main and decisive item in the income of the Soviet State, responsible not only for the greater part of public revenue (except in war-time), but also for most of the capital investment by the State in new economic construction. This is the turnover tax, the importance of which for peace-time budgets can be seen from the following table:²

¹ *Pravda*, 22nd November, 1946. ² *Ibid.*, 29th November, 1946.

² Figures for 1944 are taken from Kozlov, *op. cit.*, p. 56, and the speech of Zverev, Minister of Finance, at the second session of the Supreme Soviet in 1946 (*Pravda*, 16th October, 1946): for 1945, from the same speech: for 1946, from his speech at the third session (*Pravda*, 21st February, 1947): and for 1947 and 1948, from his speech at the fourth session (*Pravda*, 1st February, 1948). Pre-war figures can be found in Bogolepov, *The Soviet Financial System* (1945), p. 13.

Year.	Turnover Tax.	% of Budget Revenue.
1938-40 (total)	283 milliard roubles	61.3
1944	91.7 " "	34.1
1945	123.1 " "	40.8
1946	191.0 " "	59.2
1947	239.9 " "	62.3
1948 (plan)	280.1 " "	65.4

The turnover tax is a sum levied, in accordance with a rate varying from industry to industry, on the actual cash sales of the factory: which means, as wholesale prices of the commodities it produces are also fixed by the State in advance, that the ability of the factory to meet the *anticipated* amount of turnover tax under its financial plan depends first and foremost on the quantity and variety of output. The factory cannot "take it out of the consumer", should quantity fall below standard, by raising prices. Thus the fulfilment of obligations in respect of turnover tax is an additional powerful means of keeping production up to the mark.

Turnover tax is not paid on goods passing from enterprise to enterprise within the same branch of industry: or on semi-finished goods which have already paid turnover tax at an earlier stage: or on manufactures from by-products or waste material, not provided for by the plan (this to encourage supplementary output of every kind): or on goods manufactured by industries belonging to local authorities, and using local sources of raw materials and fuel not governed by the central State plans.

Turnover tax plays a most important part in ensuring the rational use of accumulation in Soviet economy, and therefore in promoting that constantly expanding reproduction which is the latter's aim. Soviet economy, taken as a whole, produces a *surplus product* every year: the problem is to re-distribute that product for the purpose just mentioned (and for defence). By imposing a higher

turnover tax on light than on heavy industry, the Soviet State realises part of the *value* of the surplus product of heavy industry through the *prices* of the product of light industry.¹ For this reason, industries manufacturing the means of production (such as engineering, metallurgy, chemical, coal) pay a very low tax—and therefore do not pass on too heavy a burden to the industries which use their output in order to build or equip new factories. For similar reasons, new factories pay a very low turnover tax in the first period of their working, until they have fully mastered the production process. On the other hand, the highest and most varied rates fall upon industries producing articles of consumption; and in the main it is from the light industries that the revenue from turnover tax comes.

The variation in rates depends upon factors all of which,

¹ It may be useful to summarise here the theoretical analysis given by Soviet economists, e.g., Voznesensky, *Voyennaya Ekonomika SSSR*, pp. 145-8, or K. Ostrovityanov in *Planovoye Khoziaistvo* (1946), No. 6. The sum-total of *prices* of all the output of Soviet economy must be equal to the total sum of all its real *values*. The latter represent the costs of producing that total social output of the U.S.S.R. And costs, in their turn, are determined by the quantity of *socially-necessary labour* expended by the Soviet peoples in production. Prices in Soviet economy, therefore, do not depend on "supply and demand", but are the direct expression of socially-necessary labour expended. But the price of each *individual* commodity in Soviet economy need not necessarily, and does not, represent the exact amount of socially-necessary labour expended on it. For the Socialist State, in planning its economy from year to year with the object of developing and reinforcing Socialist society, requires from time to time to change the proportions in which material resources and labour are put to social use in various fields. And one important means of effecting this is through the price-fixing machinery. Provided *total* prices equal *total* values, the Socialist State can and does fix *individual* prices above or below *individual* values—not in a chase to maintain an average rate of profit, as in capitalist society, but in a planned scheme to promote (i) expended socialist reproduction, (ii) the independence and defence of the U.S.S.R. Thus Socialist economy is able, for the first time in history, to use the law of value (in its altered form since capitalism no longer exists) and bend that law to its will.

in practice, make it incumbent on managements to use their resourcefulness and initiative according to the means at their disposal. Thus, the technical level of equipment in State enterprise is, as a general rule, higher than that in co-operative enterprise: which means that managements in the first case have greater opportunities than in the second. The source of supplies of raw material (centralised, local, etc.) is also a factor in varying the rates of turnover tax, as is likewise the cost of transport.

Thus variations in the rates and amounts of turnover tax are carefully adjusted to the general economic plans of the country, and are not based upon any rough estimate of the direct importance of the industry concerned. This is very clear from the following table, showing how differently placed the various groups of industry were in 1939, according to whether the value of their output or the amount of tax paid were considered:

<i>Economic Ministries.¹</i>	<i>% of gross national output.</i>	<i>% of total turnover tax paid.</i>
Heavy industries (with timber and fish)	60.1	5.0
Food industry	11.7	29.7
Textile industry	10.2	13.0
Light industry	7.9	2.6
Meat and dairy industry . .	4.5	7.3
Department of Supplies (grain purchases, raw cotton, etc.)	2.5	34.4

This extreme flexibility of assessment is what creates a permanent incentive to efficiency and economies.

"The obligation of any economic Ministry to pay a fixed amount of tax impels it to take every possible step to ensure fulfilment of the production plan. The same purpose is promoted by the regular control of

¹ *Dohody Gosudarstvennogo Biudzheta SSSR* (1945), p. 16.

the financial machinery over payment of the tax, and consequently over realisation of output and fulfilment of the production plan.”¹

The extent to which this supervision goes can be seen from the regulations as to payment. Where sales of the commodity concerned go on all the year round (for example, textiles, sugar or tobacco), turnover tax has to be paid in daily, with not more than three days' delay, while in other cases the payment is made at intervals of ten days or (in the case of small factories) as long as one month. In some cases the tax is paid not by the factories themselves, but by local or regional wholesale stores which exist throughout the U.S.S.R.: the factories dispose of their output to these stores at a price which excludes the turnover tax, while the stores impose the tax during re-sale.

The effect of this, incidentally, is to interest local authorities throughout the country in supervising the work of the wholesale stores, and therefore indirectly of the factories concerned—since a certain proportion of their own revenue is drawn from turnover tax paid within their area (22% of the budgets of the sixteen Union Republics, and 26% of the budgets of lesser local government authorities).²

Thus once again we see “rouble control” at work—with all that this implies in the enlistment of the human factor (and, incidentally, of personal material interest) in fulfilment of the community's economic plans. This is a very different picture from that usually drawn of a “regimented” machine, directed from above, and depending for its results upon blind obedience and automatic execution of orders issued by remote bureaucrats,

¹ *Dohody Gosudarstvennogo Biudzheta SSSR* (1945), pp. 16, 25-6, 28-9.

² Rovinski, *Gosudarstvenny Biudzhel SSSR* (1944), p. 49.

without the possibility of flexible review or individual initiative.

The fact is that the manager of a Soviet industrial enterprise requires at least as much knowledge of all stages of the work of his enterprise, as much ability to analyse and interpret the technical and economic results of its working, as much ability to discover new reserves of productive possibility within his given machinery, raw materials, financial resources, labour force, as any manager in any other country. But in addition he must have mastered the principles of *Socialist* business management, which serve the community in the first instance, and not private shareholders; and he must be familiar with the economic *theory* underlying Soviet national housekeeping, particularly the laws of expanded Socialist reproduction. Without this broad horizon he will be unable to ensure fulfilment of the production plan of his factory in all its amplitude.

On the work of such men and women, gaining in experience and greatly increasing in numbers as Soviet economy has progressed from the beginning of the first Five Year Plan in 1929, the strength of the U.S.S.R. depends. They are not all successful, as we have seen; and when they are successful, it is not all at once. Soviet management has to learn by experience—but it has learned a great deal. It is still less easy, once this is clear, to be patient with those who suggest that the U.S.S.R. has not a permanent and vested interest in peaceful relations with other countries. The methods of Soviet planning, no less than its aims, which were reviewed in the first chapter, should leave no doubt about that in the mind of any reasonable inquirer.

CHAPTER III

THE WORKERS' EFFORT IN SOVIET PLANNING

I. SUBBOTNIKS AND RECONSTRUCTION

ON 20th January, 1940, not in an impromptu speech at a public meeting, but in a carefully-prepared broadcast address, Mr. Winston Churchill launched one of the many winged phrases for which he is famous. "Everyone can see how Communism rots the soul of a nation," said Mr. Churchill, "how it makes it abject and hungry in peace and proves it base and abominable in war."

Twenty-one years before, during the war of invasion which, under the leadership of Mr. Churchill, was then raging on Russian soil, Vladimir Lenin had written in *Pravda* (28th June, 1919):¹

"The Communist organisation of social labour, the first step towards which is Socialism, rests, and will do so more and more as time goes on, on the free and conscious discipline of the very working people who have thrown off the yoke of the landlords and capitalists.

"This new discipline does not drop from heaven, nor is it born out of pious wishes; it grows out of the material conditions of large-scale capitalist production, and out of this alone. Without this it is impossible. And the vehicle, or the channel, of these

¹ Printed in English as a pamphlet: *A Great Beginning* (undated) by the Co-operative Publishing Society of Foreign Workers in the U.S.S.R. These extracts are on pp. 9, 12-13.

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material conditions, is a definite historical class, created, organised, consolidated, trained, educated and hardened by large-scale capitalism. This class is the proletariat. . . .

"In order to achieve victory, in order to create and consolidate Socialism, the proletariat must fulfil a two-fold or dual task. First, by its devoted heroism in the revolutionary struggle against capital, it has to draw in its train the whole mass of the toiling and exploited people, to carry them with it, to organise them and lead them in the struggle to overthrow the bourgeoisie and utterly to suppress its resistance. Secondly, it must lead the whole mass of toiling and exploited people, as well as all the petty-bourgeois elements, on the road of new economic construction, on the road to the creation of new social ties, a new labour discipline, a new organisation of labour, which shall combine the latest achievement of science and capitalist technique with the mass association of class-conscious workers engaged in large-scale Socialist production.

"The second task is more difficult than the first, for it cannot possibly be fulfilled by single acts of heroism; it requires the most prolonged, most persistent and most difficult mass heroism and *prosaic, everyday work*."

Thus Mr. Churchill considered that Communism rots the heart of a nation. Lenin, on the contrary, considered that the struggle for Communism produced a new kind of mass heroism in a nation. Which of them was right? Mr. Churchill's opinion was indeed a hard judgment, in particular, upon the Socialist plans of two generations of Russian revolutionaries. In one of his rare interventions in their political discussions, Karl Marx had written in 1877 to the editor of *Otechestvennye Zapiski*, a progressive Russian review, that the aim of Socialism was to "arrive at the form of economy which will ensure, together with

the greatest expansion of the productive powers of social labour, the most complete development of man".¹ This judgment had not been subsequently questioned by Russian Socialists.

The answer to the question whether Churchill or Lenin was right is not merely of academic interest, nor is it only a question of party politics. It is of the first importance in estimating at their true value the predominant interests of the Soviet working class—the strongest single factor in Soviet society. If the material difficulties which had to be overcome in carrying out the Five Year Plans, and the methods by which those Plans have been carried out, dictated a policy of peace to those responsible for Soviet foreign relations, what of the working class on whose labour the Plans are equally dependent? Has the experience of the U.S.S.R. justified Lenin's belief in the emergence of a new attitude to work; and, if so, what bearing has that attitude on the interests and motives of Soviet foreign policy?

A conscientious study of this question must begin with the occasion that prompted Lenin's remarks. It was the news that, on 7th May, 1919, a general meeting of Communist railwaymen and their non-party sympathisers working on the Moscow-Kazan Railway had decided to work an extra day the following Saturday, without pay, on urgent jobs, such as repairing railway engines and passenger wagons, and loading freight at the marshalling yards. The work was urgent because there was a great shortage of labour: the Red Army was desperately engaged with Kolchak on the Eastern Front, Denikin was well advanced with preparations for an attack with his "Volunteer Army" against the Soviet Republic from the south, there was little fuel and very little to eat. The

¹ Marx and Engels, *Correspondence* (English edition, 1934), p. 354.

resolution was adopted unanimously. On the day appointed 205 workmen and office employees turned up. They completed the repair of four railway engines and sixteen carriages, and loaded or unloaded 150 tons of freight. Their output was nearly three times as high as that of ordinary workers: jobs which had been held up for periods ranging from seven days to three months were put through.

It turned out, when this was published by *Pravda* on 17th May, that similar efforts had been made at several other places. But what aroused general interest in the country was that the Moscow-Kazan railwaymen had decided to continue this example every Saturday until Kolchak had been defeated. Within a few weeks the example had spread to many other railways, the Communists taking the lead, and hundreds of non-Communists following their example. The movement became known as "Communist Subbotniks" (from the Russian word "*subbota*", meaning Saturday). Moreover, it began to spread immediately in the form of friendly competition or rivalry. Lenin had already been meditating on the likelihood of a new kind of competition emerging from Soviet society. In an article he wrote in January, 1918, he had said: ¹

"Socialism does not extinguish competition but, on the contrary, creates for the first time the possibility of applying it on a really *wide*, really *mass* scale, of really drawing the vast majority of the working people into a sphere of work in which they can show what they can do, develop their abilities, display the talents of which in the people there is still an untapped source, and which capitalism trampled on, crushed and strangled by thousands and millions.

¹ *Kak Organizovat Sorevnovanie* (Works, 3rd Russian edn., vol. xxii, pp. 158, 161).

"Our task, now that a Socialist government is in power, is to organise emulation. . . .

"Widespread and truly mass possibilities of displaying enterprise, emulation, bold initiative have appeared only now. . . . For the first time after centuries of work for others, of unfree work for exploiters, there appears the possibility of *working for oneself*—and, moreover, of relying in this on all the achievements of modern technique and culture."

It is a fact, at any rate, that the example set by the Moscow railwaymen found many thousands of imitators in different parts of the country and in different industries. From May to September, 1919, the numbers taking part in Subbotniks in Moscow rose from 781 to 6773; then, after a break during a month of deadly peril, in which Soviet Russia was assailed by enemy armies from four different directions, the numbers rose again from 15,928 in November, 1919, to 41,587 in February, 1920. Then came the new strain of an attack by Poland, which occupied the spring and summer months; but with the restoration of peace, from December, 1920, to April, 1921, the numbers rose again from 95,743 to 101,348.¹ Parallel with Moscow, all the other industrial centres not under enemy occupation had developed a similar movement: by the middle of September, 1919, Petrograd, as it then was, had more engaged in Subbotniks than Moscow. At the height of the Polish war, the Communist Party had issued a call for May Day, 1920, to be celebrated not by demonstrations, as was the old working-class tradition, but by a Subbotnik on urgent jobs of all kinds. At Petrograd, 165,000 responded to the call; at Voronezh, 25,000 worked on repairing rails, refrigerator stores and the shattered water supply; in the Nizhni-Novgorod

¹ Figures given in Lenin, *Selected Works*, vol. viii, p. 432, and *Mosk. Gub. Konferentsia VKP(b)*, (1921), p. 79.

province, 600,000 took part in town and country; the numbers throughout Soviet Russia ran into several millions.¹ The frightful destruction which the end of foreign invasion and civil war had bequeathed to Soviet economy gave ample scope for such a movement: 7000 railway bridges were blown up, scores of mines flooded, blast furnaces wrecked, railway rolling stock almost entirely out of action. The testimony of the first British Labour Delegation, sent out by the Labour Party and the T.U.C. in the spring of 1920 and composed in the main of persons far from sympathetic to Communism, is all the more striking:

"Voluntary and unpaid labour on Saturday afternoons for purposes of reconstruction (the 'Subbotnik', as it is called)—carried out, it is true, mainly by Communists and partly to be regarded as a means of educating the public—has become one of the regular features of town life. The idea of the duty of all citizens to take part in reconstructive work for the State is being inculcated to a degree unknown elsewhere."²

The tradition of these efforts remained part of the Soviet way of life. "When the civil war came to an end, the workers organised Subbotniks to repair the factories. The miners of the Donbass, standing up to the waist in water, starving and freezing, pumped the water out of the pits that had been flooded by the White Guards."³ Later on, during the construction of the great tractor works at Kharkov in the course of the first Five Year Plan, the city population came out in thousands on their free days to clear the immense site of rubbish in order to enable

¹ *Kommunisticheski Internatsional*, September, 1919, p. 670, and May, 1920, p. 1691.

² *Report of British Labour Delegation to Russia* (1920), p. 9.

³ *Socialist Industry in the U.S.S.R. Victorious* (Moscow, 1931), p. 22.

the building workers to concentrate on their own job. Later again, during the second Five Year Plan, the building of the Moscow Underground was the occasion for a further display of this kind of "free and conscious discipline". During nine months over 200,000 people of both sexes, office workers and manual workers alike, gave up their free time for voluntary effort in the tunnels, supplementing the work of the full-time constructional workers. "All Moscow builds the Underground" was the slogan to be seen in every corner of the Soviet capital during these years. More details and other instances can be found in the second volume (pp. 753 onwards) of Sidney and Beatrice Webb's *Soviet Communism*.

Long before this, however, the problem of the workers' part in the conscious building of the economic basis for a new society had gone beyond the stage of these emergency or minority undertakings. Immediately the tiniest breathing-space had been secured in the Soviet Republic's struggle for life, the question of planning had been discussed;¹ and the effect which planning might have in awakening the enthusiasm of the working class and the peasantry—excluded before 1917 from any part in deciding the economic destinies of their country—became a practical question.

In January, 1920, a Soviet engineer and old Bolshevik, G. M. Krzhizhanovski, wrote a short article on the question of electrifying Russian industry as the high road to industrial progress, and sent it to Lenin for his opinion. In reply (23rd January, 1920) he received an enthusiastic letter from Lenin, saying that he ought to write two or three more articles of the same practical character, which could be published later as a pamphlet, and continuing:

¹ For example, in the *Programme* of the Russian Communist Party, adopted at its VIII Congress in March, 1919.

"Could not there be added a *plan*, not a technical one (that, of course, is the job of *many*, and not to be done in a hurry), but a political or State plan, *i.e.*, a target for the working class?"

"Something like this: in 10 (5?) years let's build 20 to 30 (30 to 50?) power-stations, in order to cover the whole country with central stations with a radius of 400 (or 200, if we can't manage more) versts: driven by peat, water, shale, coal, oil (*approximately* to go through all Russia, roughly speaking). We'll begin at once buying the necessary machines and models. In 10 (20?) years we'll make Russia 'electrical'."

"I think you might provide such a 'plan', or *draft plan*—I repeat, not technical, but State."

"It ought to be provided right away, in order graphically, popularly, for the masses, to carry them away with a clear and vivid prospect (entirely *scientific* in its basis): let's get to work, and in 10 to 20 years we'll make all Russia, both industrial and agricultural, an *electrical* country. We'll work up to *so many* (thousand or million horse-power or K.W.?? whatever it is) mechanical slaves, etc."

"If we could also have an *approximate* map of Russia with centres and circles, or isn't that possible yet?"

"I repeat, we must carry away the *mass* of the workers and public-spirited peasants by a *great* programme of 10 to 20 years."

One result of this letter¹ was the formation of the State Commission for Electrification in February, 1920, which, as was shown earlier, proved the nucleus of the future planning machinery of the U.S.S.R. Its formation was accompanied by a declaration of the All-Russian Central Executive Committee of Soviets on the question of

¹ Krzhizhanovski, Gorev and Yesin, *Chetyre Goda Elektrifikatsii SSSR* (1925), pp. 7-8.

electrification of Russia, stating that with what seemed at the moment the end of the Civil War, Soviet Russia "for the first time has the possibility of beginning more planned economic construction, scientifically working out and systematically fulfilling a State plan for all national economy".¹ The same VIII Congress of Soviets which, in December, 1920, adopted the plan of electrification submitted by Krzhizhanovski, expressed its confidence "that all workers and working peasants will bend every effort, and will stop at no sacrifices, to carry out the plan for the electrification of Russia at all costs, and in spite of all obstacles". It introduced a special decoration for "devotion, initiative, industriousness and self-discipline in solving economic problems", called the Order of the Labour Red Banner. In a special manifesto to the working people of Russia,² congratulating them on the victories won in the Civil War, the Congress went on:

"Working people of Russia! By these three years of the greatest privations and bloody sacrifices you have won yourselves the right to set about peaceful work. Let us devote all our strength to that work. Let there not be in our Soviet land a single person capable of labour who is not at work. Let there not be a single machine standing idle. Let there not remain unsown a single dessyatina of ploughland. Let us take the greatest care of the people's property, remembering that now in Russia there is only one kind of public property—the workers' and peasants' possessions. Let us redouble our labour effort, and reward will not pass by the working people. One more year, and if we strain our efforts, we shall not freeze in unlit houses. Another two or three years,

¹ Krzhizhanovski, Gorev and Yesin, *op. cit.*, p. 8.

² *Vosmoi Vserossiiski Syezd Sovetov* (1921), pp. 265, 272, 276.

and we shall restore the railways and set going all the factories of the country.

"Another three or four years, and in the Republic there will be no half-clothed and bare-foot people. Another five years, and we shall finally heal the wounds inflicted on our economy by war. So to work, Workers' and Peasants' Russia! Honour and glory to that factory, that village community, that individual worker, who first receives from the Republic the Order of the Labour Red Banner.

"Conquerors of Kolchak, Denikin, Yudenich and Wrangel! The supreme organ of power in the country, the All-Russian Congress of Soviets, calls you to new struggle and new victories. Long live our victory on the labour front!"

Thus the idea of labour heroism and of a new attitude to public property was bound up with that of the planned reconstruction and development of the country, as well as with the idea of emulation in peaceful work. Ideas expressed by Lenin in articles and letters had become not only public policy in the narrow sense, but the subject of something like a nation-wide popular undertaking—since the 2500 delegates of the Congress represented nearly twenty nationalities of Soviet Russia, and two-thirds of them were industrial workers or peasants representing the working millions of Russia's population. Behind them was only the brief experience in making industry and agriculture work during three years of difficulties which might have broken the hearts of any other people in Europe, and of management of public affairs at the local, regional or national level, which several scores of thousands of men and women, coming directly from factory bench and plough, had had forced on them by sheer necessity. But there was also the example of the Subbotniks, and of the advantages which the Red Army,

with political understanding of its aims but with inferior weapons, had had over armies, both Russian and foreign, greatly superior in their equipment, but hopelessly bemused in their political understanding. From now on, therefore, the question of carrying out the economic enterprises of the Soviet State was closely bound up with that of first stimulating and then properly harnessing the conscious effort of the people. No disquisition on the theoretical advantages or disadvantages of State planning, much less any attempt to explain, extol or decry the "Soviet experiment", have any value whatsoever unless they take full account of this interconnection in the U.S.S.R. between public enterprise and social effort.

During the first few years, it is true, the production propaganda of the Communist Party and the trade unions did not attempt as a rule to suggest new forms of such social effort. The strain of bringing industry back to its pre-war level and maintaining a large number of unemployed in the meantime, of satisfying the peasantry's demand for manufactured goods at sufficiently low prices, of stimulating the output of greater quantities of agricultural produce, of stabilising the currency and improving home and foreign trade, was more than enough to tax the energies and resourcefulness of those who held executive posts, central and local. But by the beginning of 1924 the worst problems had begun to be solved.

2. PRODUCTION CONFERENCES

It was at this moment, in January, 1924—on the eve of Lenin's death, but when he had been out of action already for many months—that the XIII Conference of the C.P.S.U., in its discussion of immediate economic problems, declared that the trade unions should begin

looking among the workers, more energetically than before, to find people with organising experience who were capable of becoming the managers of State-owned factories. Special schools were necessary for this purpose, "and also the drawing of the broad masses into discussion of the economic situation and of the current work of industrial enterprises. . . . At production conferences, where current questions of industrial life can be discussed, results summed up, opinions exchanged, there should come together representatives of economic bodies, trade unions, the Party and non-Party workers. They should be held regularly. These conferences must make it possible for the trade unions carefully to study and supervise the management of factories, giving every possible assistance to the economic bodies in improving economy, fighting mismanagement and excessive overhead charges, etc."¹

At first, as shown by a special circular of the Central Committee of the C.P.S.U. in February, 1924, the tendency was to lay stress on the initiative of the Communist group in the factory, and of conferences of such groups from various factories.² But even in this circular the Party members attending the production conferences were enjoined to take advantage of factory meetings and

¹ *VKP(b) v Rezolutsiakh ee Syezdu i Konferentsii* (1927), p. 508.

² However, it is noteworthy that in the first half of 1924 the influential Textile Workers' Union organised women workers' production conferences at Ryazan, Kostroma, Yaroslavl and other centres of the textile industry, which were attended by large numbers of factory operatives as well as by their elected delegates. Thus, at the conference held at the "Krasny Vostok" factory, Ryazan, there were 300 women workers as well as 45 delegates from various textile factories. The discussion turned on such questions as extension of crèches for factory workers' babies, improvement of training for girl apprentice weavers in the factory schools, the training of women to be assistant foremen, efforts to draw women into the general production conferences in the industry, etc. (*Otchet Zentr. Komiteta k VI Svezdu Textilshchikov*, 1924, p. 77).

delegate conferences of the workers to get the latter to discuss the business activity and production problems of the factory in which they were engaged, "as for example questions of costs of production, prices of goods, productivity of labour, degree of skill of the workers, the collective agreement, etc."¹ In fact, in the course of the year the necessity of putting production meetings in the shops, and production conferences for entire factories, upon a broader basis was recognised as a result of practical experience, and in September, 1924, the trade union daily newspaper, *Trud*, published model rules for the holding of these conferences on a trade union basis.

In May, 1924, the Moscow Committee of the C.P.S.U., recognising that the "improvement which has taken place in the economy of the country is still far from the situation which might be called secure", said it was necessary to begin "the practical organisation of periodical reports on, and the working out of problems of, the economic situation, and of plans of work, at specially summoned extended delegate meetings jointly with the technicians and individual workers who are interested".² But a few months later, experience had persuaded the Communists of Moscow that "the work of production conferences and committees in the factories . . . is the affair of the trade unions", and that Communist groups in the factories should not themselves direct these conferences, but "shift the responsibility of drawing the mass of workers into production affairs to the shoulders of the works committee, thereby both raising its authority and improving trade union work generally".³ And, by the time of the XIV Moscow provincial Party Conference

¹ *Spravochnik Partiinogo Rabotnika*, IV (1924), pp. 106-8.

² *Materialy k XII Mosk. Gubpartikonferentsii* (1924), p. 24.

³ *Otchet o rabote Baumanskogo RK* (1924), pp. 14, 114.

(11th December, 1925), the chairman of the Moscow Trades Council was able to report:¹ "Production conferences have really proved a school whence have come a number of workers for administrative and economic work, a school of training of future managers." Over 250,000 workers had taken part during 1924-25 in the election of delegates to production conferences, he said. And even from the strong criticism expressed by one woman delegate about the inadequate efforts made to draw women into these meetings—in the textile industry, for example, where 57% of the workers were women, but only 15% of those attending production conferences were women—there emerged the growth of a new attitude to labour and public problems. In all the areas of the Moscow province where the Communists were holding broadly-elected delegate conferences of non-party women, to discuss all kinds of social problems—among them the great textile centres of Serpukhov and Orekhovo-Zuyevo—the women themselves were constantly turning the delegate conferences into production conferences, *i.e.*, discussing output programmes, problems and shortcomings.²

In his report on organisation to the XIV Party Congress in December, 1925, Molotov stated that, according to data still incomplete, there were in Moscow 371 standing production conferences with 34,000 participating, at Leningrad 204 with 36,000 participating and at Tver 198 production conferences with 13,000 participating.³

At Leningrad, although in only 19% of the factories had production conferences been organised, and even there the participation of non-Communist workers was in-

¹ *XIV Mosk Gubpartikonferentsia* (11/xii) 1925, p. 18.

² *Ibid.*, p. 37. It should be borne in mind that "equal pay for equal work" is the rule in Soviet industry.

³ *XIV Syezd VKP(b)* (1926), p. 60.

sufficient (42% of those attending), nevertheless—it was also reported at the XIV Congress of the C.P.S.U.—25,000 workers had taken part in the proceedings of production conferences (the remainder of the 36,000 attending being technical and managerial personnel). Many useful proposals had been made, of which more than half had already been carried out with advantage; and about 2000 workers had been trained by their experience in the production conferences to take over at least junior managerial posts in production.¹

What were these production meetings and conferences? Essentially they were general meetings of all workers who cared to attend, or delegate conferences of their elected representatives where the factory was too large (or where it was a question of covering a group of factories), jointly with managers and technical staff. At these meetings the manager of the shop or factory or State trust made a report on the conditions of the industry, and particularly of the factory, its production and sales problems, and suggestions for improvement. There were (and are) no trade secrets or confidential financial aspects of Soviet industry, and this put the discussion at once on a broad basis. The workers were encouraged to engage in the fullest possible discussion of every aspect of production, both human and technical, and to make their suggestions as practical people who felt where the shoe pinched. A production committee was usually elected, to take careful note of the suggestions made and to see that they were applied. In practice the fight for the application of workers' suggestions became even more important than the effort to collect those suggestions; routine, conservatism, bureaucracy, proved the greatest obstacles to be overcome. Nevertheless, the active workers who made

¹ XIV Syezd VKP(b) (1926), pp. 733, 787.

their suggestions had one immense and, in the long run, overriding factor on their side: the general understanding that "now in Russia there is only one kind of public property—the workers' and peasants' possessions".

The XIV Congress of the C.P.S.U., meeting on the eve of the year which, in the main, completed the restoration of pre-war levels in industry and agriculture, now raised in a new way the question of drawing upon the workers' initiative. It took up again the call first made in December, 1920, but in different and measured terms, suited to the new stage of Soviet economic life which was now opening. It declared: ¹ "More than ever before, our trade unions must be a school of constructive work, initiative, activity, mobilisation of forces of the workers and their hundred per cent organisation, a school for drawing ever wider masses of working people into the building of Socialism."

The best means of engaging the general mass of the workers in the practical building up of Soviet economy, "of training up in them an understanding of the intimate relationship between the interests of the working people and the degree of economic success of the Socialist State, and of bringing forward and training up new managerial and administrative personnel from among the workers, are production conferences in factories, works and other large economic units". Both managers and trade union leaders must watch and study the work of the production conferences and the proposals they put forward, and must "clearly, openly and precisely state the reasons why particular proposals are not adopted, and correct their mistakes and deviations". It was through production conferences, developed in this way, that the trade unions would be able to achieve the aim set by the XI Party

¹ VKP(b) v Rezolutsiakh, etc. (1927), pp. 628, 632.

Congress in 1922, when the Civil War ended, of "practically training the industrial workers and all the working people to manage the national economy of the entire country".

A year later, in 1926, bigger results were reported at the XV Conference of the Communist Party (held in October and November) and the VII Trade Union Congress (December). Most big works had gone over to the system of shop production meetings: and although the average attendance at these meetings was about 10% of the workers in industry, the aggregate numbers involved were far larger than before.¹ The decisions of the XIV Congress had aroused a great interest on the part of the workers, but technicians had not attended production conferences at first; and this, together with a lack of interest, or even jealousy on the part of managements, had led to not more than 30% of decisions being accepted by the latter—with a consequent decline of interest by the workers in the summer of 1926. But the raising that autumn of the issue of rapid industrialisation of the country caused a marked change. Technicians were now attending production conferences, and subjects for discussion were now far-reaching problems of the factory rather than petty improvements of detail, which had aroused most interest at production conferences in their first stage. Large numbers of useful proposals were being made. In Moscow fifteen production conferences, covering whole branches of industry, were going on at the time of the Conference, at which representatives of half a million workers attended. In the metal industry as a whole the

¹ *Otchet VZSPS k VII Syezdu Profsoyuzov* (1926), pp. 276-8. This percentage represented about 260,000. In the period October 1926-March 1927, 15 trade unions reported 362,000 taking part in production meetings (64% of them shop meetings), according to *Vestnik Truda*, the trade union journal (No. 11, 1927).

proportion of workers participating in production meetings of all kinds was over 20%.¹ The value of the proposals made by the workers could be judged from the fact that, in the metal industry of Leningrad alone, one quarter's proposals had led to economies exceeding 450,000 roubles a year.² In ninety-six of the biggest works at Leningrad about one-third of the chargehands were now promotees from among the workers through production conferences. As before, the women workers were displaying particular interest in the movement: throughout Leningrad industry, in October, 1926, while women constituted 30% of the general labour strength, nearly 32% of those taking part in production conferences were women.³

In the course of 1926-27, also, new forms of participation by the workers in the planning of their industry began to appear. One was the holding of special meetings to discuss the calculation of costs of production, which attracted much greater attendances than the general production conferences. At Kostroma the Department for Workers' and Peasants' Inspection formed "investigation teams" of volunteers from among the workers, jointly with representatives of trade unions, the Communist League of Youth, etc., to visit the factories and discuss their successes and shortcomings with the workers concerned. At Tver the local paper invited a number of workers to constitute a provincial "control commission" to act as a centre for stimulating the workers' interest in production problems. This example was followed at

¹ *XV Konferentsia VKP(b)* (1927), pp. 342-3, 373, 389.

² *Otchet VZSPS*, etc. (1926), p. 280. According to the statistics of *Vestnik Truda*, quoted above, about three-quarters of the 38,000 suggestions made in 15 industries had been accepted in the first half of 1926/27.

³ *Za Ratsionalizatsiu: Sbornik Statei* (1927), pp. 106, 109.

Saratov and Rostov. "Production courts" were organised in a number of factories, to "judge" examples of bad output or bad work in front of a mass meeting of the workers, who were invited to discuss the reasons for these bad results. Yet another form developed in 1926-27 was "production excursions" to neighbouring works or shops in the same industry, usually for the purpose of learning how they managed to get better results than the excursionists, but occasionally for the opposite purpose. A remarkable result attended a "public inspection" organised by the Tver *Pravda* at the big Proletarka textile factory in that city. In the course of six weeks the workers made 2242 proposals concerning the industry—almost ten times more than the number made at production conferences in the course of a year. An indication of the method adopted, and of the response to it, is given by the fact that from 25% to 30% of the workers became "worker correspondents" of the Tver *Pravda* during the inspection.¹

At the XV Congress of the C.P.S.U. in December, 1927—known in Soviet history as "the congress of collectivisation", because by its far-reaching decisions on this question, and its final defeat of the internal Trotsky opposition within the Party, it prepared the way for the first Five Year Plan—the tale of results was very striking. The report given on behalf of the Central Committee stated that there was not the slightest doubt about the growth of the production conferences during the last two years. They had "struck root" in the shops, they were held more regularly, there was an increase in the number of workers participating. At Leningrad the numbers had gone up by 35%, in the Moscow metal industry by 40%, at Nizhni-Novgorod by 64%. The Central Council of

¹ *Za Ratsionalizatsiu*, etc. (1927), pp. 22-3, 86, 96-7.

Trade Unions now considered that about 15% of all workers in industry were directly participating (*i.e.*, about 450,000, as against the 260,000 to one year before). The main interest at the production conferences now centred on the improvement of the planned work of the enterprise—particularly on questions of repair and re-equipment, rationalisation and mechanisation. Thousands of proposals were being made by the workers, of which some four-fifths were being accepted, and the proportion being put into practice was also increasing: both at Moscow and at Leningrad it had risen to over 60%.¹

The Congress once again declared the "most important and decisive condition" for the rationalisation of industry to be the drawing of the workers themselves into active co-operation. By "unleashing the initiative of the masses", the trade unions would be playing a particularly important part. It called on them to "help backward sections of the proletariat to realise to the full that it is just the proletariat as a class that is the master of industry, that before it there open up vast prospects, provided there is tireless and unswerving progress in the industrialisation of the country, the rationalisation of its economy, the building of Socialism".² This reference to the backward sections of the workers did not come by chance. The industrialisation of the country made it necessary not only to absorb completely the one-and-a-half million unemployed who were still registered at that time, but also to bring millions of new workers into industry, chiefly from the countryside. And in the countryside the vast majority of the peasants were still engaged in petty production, and far from Socialist in their outlook.

It is also relevant to remember that at this time relations

¹ *XV Syezd VKP(b)* (1928), pp. 86-7.

² *Rezoliutsii i Postanovlenia XV Syezda VKP(b)* (1928), pp. 74-6.

with a number of countries had taken a sharp turn for the worse, following the raid on Arcos, Ltd., and the rupture of Anglo-Soviet diplomatic relations in the spring.

The seriousness with which the leading authorities of the U.S.S.R.—unlike many foreign economists—regarded the rôle of the Soviet workers in management is indicated by the sharp criticism made of the whole position a few months later, when the first case of planned wrecking had been discovered at the Shakhty collieries in the Donetz Basin. The positive achievements reported at the December Congress had been only a beginning. A joint resolution on the Shakhty case adopted by the Central Committee and Central Control Commission of the C.P.S.U., on 11th April, 1928, declared its dissatisfaction with the degree to which the masses were being drawn into the management of production.

“Information given to the workers as to the plan and progress of production is often of a formal character; questions of production, of its rationalisation, of capital works, etc., are not discussed at production meetings, while in some cases there is even persecution of workers for criticising defects in the work of managements. Trade unions do not work systematically at raising the importance of production meetings: meetings are badly organised, called irregularly, ignored by technicians and sometimes by Communist managers, and there is inadequate supervision of fulfilment of their decisions.”

The resolution demanded drastic changes in all these respects.¹

This example of condemning complacent satisfaction at results already achieved, and of drawing attention to the amount of work ahead rather than to what had been done

¹ *Rezoliutsii Obyedinennogo Plenuma ZK i ZKK VKP(b)* (1928), pp. 26–7, 36.

already, proved of considerable value in stimulating the work of the production conferences. No less important was the part played throughout 1928 by the campaign against the Right opposition in the Party: because it turned precisely upon the issue of whether Russia, with its working class as leader of all other classes, was capable of building a Socialist society unaided. And towards the end of the year there were signs that a new stage in Socialist emulation was approaching.

3. THE SHOCK BRIGADES

At the Ravenstvo (“Equality”) textile factory at Leningrad a group of young workers in the ring-spinning department formed a “shock brigade” for the purpose of setting an example of good production, attendance to problems of costs and so forth. They secured an increase in speed of output of 8% on their own group of machines, and lowered costs by 4%. The movement gradually spread through the factory, and three months later 30% of its workers were in shock brigades. The initiative of these young workers aroused considerable interest, and a number of youth brigades were formed at factories in Zlatoust, in the Urals.¹ At the end of 1927 a group of young workers at the “Communist Vanguard” textile factory at Sobinka (Vladimir province) had formed a “rationalisers’ group”. It began by discussing such questions as idle ventilating machinery, automatic switches, etc., and only gradually succeeded in enlisting the interest of some of the technicians of the factory. Overcoming a good deal of initial resistance on the part of the management, the Party organisation in the factory and adult workers, the group managed in the course of

¹ Popov, *Chto Dayot Rabochaya Initsiativa* (1930), pp. 66, 71.

1928 to extend its numbers to about 200, and to form further groups in various shops of the factory. This undertaking, too, aroused much attention.¹

In the meantime the production conferences also were showing a big advance. In the economic year from October, 1927, to September, 1928, the 135,000 workers of the great textile province of Ivanovo-Voznessensk made over 8000 proposals for improving industry. In the mining and engineering area of Lugansk during the same period 9500 proposals were made by 125,000 workers. In the mining district of Artemovsk, where there were about 120,000 workers, 8000 suggestions were made. In all, over fifteen industrial areas of the country the number of suggestions exceeded 62,000.² Quantity here was reaching such dimensions as to become quality. A new period in the development of Socialist emulation was opening.

The turning-point came like one of those decisive changes in physics or chemistry which occur when the "critical point" is reached in a gradual process. The occasion was the beginning of discussions on the first draft of the Five Year Plan, which was ultimately to be adopted at the XVI Conference of the C.P.S.U. in April, 1929. In January of that year the daily newspaper of Soviet youth, *Komsomolskaya Pravda*, suggested that the example of the youth shock brigades should be taken up nationally in the form of an "All-Union Socialist Emulation". *Pravda*, the organ of the Communist Party, organised a "public inspection" of production conferences that lasted two months: about 300,000 suggestions were made by the workers during this period.³ The

¹ *Moskovskie Udarniki Za Rabotu* (1930), pp. 66, 71.

² Popov, *op. cit.*, p. 39.

³ Olkhov, *Za Zhivoye Rukovodstvo Sotz-Sorevnovania* (1930), p. 56.

response to these initiatives was so great as to show that some development of the forms of emulation was overdue. Mines, factories, railway depots, ports, workers throughout the country from Leningrad to Siberia, and from Moscow to the southern Ukraine, responded with the formation of shock brigades, with challenges from works to works, and with agreements between shops, factories and entire industries pledging concrete and definite achievements in various spheres.

There can be no doubt about the nature of this movement. During the *Pravda* inspection of production conferences the number of workers' suggestions at Ivanovo-Voznessensk rose to 60,000, *i.e.*, one for every two or three workers, as against one for seventeen workers in the previous year. In the fifteen industrial areas of the country mentioned above the number of suggestions was 321,600—more than five times as many as in the previous year.¹ Nor were these, and many other suggestions made during the inspection, merely idle chatter. During the economic year 1928–29 they brought down costs of production by 1.2% in the first quarter (October–December, 1928), 3.4% in the second, 6.3% in the third and 7.8% in the fourth. Productivity of labour throughout industry grew by 7% in the first quarter of the year and by 24% in the fourth quarter.² This was the direct consequence of Socialist emulation, and it brought about the over-fulfilment of the plans for the first year of the Five Year Plan. A report given at the XVII Moscow provincial Party Conference (28th February, 1929) showed that at ninety-nine production conferences organised in January and February by the Moscow Committee of the C.P.S.U. tens of thousands of delegates had been present, representing over half a million factory workers and employees.

¹ Popov, *op. cit.*, p. 40.

² Olkhov, *op. cit.*, pp. 10–11.

In six textile trusts alone the result was a net economy, following upon workers' suggestions, of 6 million roubles.¹

On 8th April, 1929, at Tver (now Kalinin), a formal agreement was signed between the Proletarka factory, already mentioned, the Moscow Trekhgornaya Manufatura, which had challenged it, and by representatives of eight other factories: in all, the factory delegates of 58,000 workers signed the agreement. Its general aim was to lower costs and raise output, but the detailed discussions in the different factories had produced much more precise obligations. The Moscow factory was to lower costs by 7.7%—signifying a total economy of 3 million roubles. Its workers promised totally to eliminate bad output, which in 1928 had averaged 3½%. The general obligation undertaken by the factory meant correspondingly precise undertakings in the various departments. The net gain to individual workers by success in this emulation agreement would mean wages averaging 3.14 roubles per day, instead of 2.75 roubles at the beginning.²

A town conference of workers of Ivanovo-Voznessensk was held on 15th April, at which the delegates who had gone to Tver to sign the agreement made their report. Some characteristic extracts are worth quoting:

"I am afraid that by May 1st the Proletarka will attain such results as will make it difficult for us to catch up with them. In March bad work was already reduced below the usual rate. The Tver workers are at present behind us in the individual output of each machine, but without doubt they will reach their objective. . . . We observed a unity

¹ Bauman, *Generalnaya Bolshevistskaya Linia i Nasha Rabota* (1929), pp. 42-3.

² Mikulina, *Socialist Competition of the Masses* (Moscow, 1932), pp. 26-7, 33.

among the workers which can only be compared with that witnessed during the days of the November Revolution. . . . We saw the enthusiasm which had taken hold of the workers. We saw absentees who swore to wipe out the ill-fame which they had earned. . . . We were particularly astonished by the cleanliness in the mechanical shop. It is something that cannot be paralleled in our factory. . . ."

The factory should by then have been producing, according to plan, 618,000 metres a day.

"The workers in their agreement undertook to produce 680,000 metres: but right from the beginning of the emulation production reached the astounding figure of 940,000 metres per day. The spinning-mill, according to plan, should have produced 40,644 kilos of yarn per day. By the agreement the Proletarka workers undertook to produce 41,170 kilos, and they have already achieved this."¹

If this detailed picture be multiplied some thousands of times in the mind's eye of the reader, it will give a very rough outline sketch of what went on in the factories—and later the offices and villages—of the U.S.S.R. during 1929. From now on, the principles of workers' emulation and of the planning of national economy in a Socialist State were bound up for good: and the problem became one of organisation, example and constant widening of the horizons of emulation, not of efforts to persuade.

The new stage was described in a manifesto "to all workers and working peasants of the Soviet Union", adopted by the XVI Conference of the C.P.S.U. (29th April, 1929) on the subject of Socialist emulation. It was a stirring echo of the manifesto of the All-Russian Central Executive Committee of February, 1920. It recalled

¹ Mikulina, *op. cit.*, pp. 34-6.

to their memories the days of the first Subbotniks, and of the declaration of the IX Party Congress that "in capitalist society emulation bore the character of competition, and led to the exploitation of man by man. In society where the means of production have been nationalised, emulation in work does not infringe solidarity but must only increase the total sum of products of labour." It urged the workers to develop their creative energies and their own education (particularly of the new workers coming from the villages and petty-bourgeoisie in the towns) by means of Socialist emulation. For this there was ample encouragement:¹

"The Socialist emulation which has developed this year, on the initiative of the Lenin Communist League of Youth and of the Press, is more and more becoming a mighty mass movement. As a result of the first steps in emulation, the miners of the Donbass (Lugansk, Shakhty) in March exceeded the output programme for coal; the textile workers of Ivanovo, Tver and Moscow have concluded an economic and political agreement among themselves for the fulfilment of the industrial and financial plans of the present economic year; workers of the Urals, Leningrad, Dnepropetrovsk, Moscow and Rostov have set up hundreds of shock brigades and shock shifts; every day fresh groups of workers enter into emulation; already the collective farms and State farms of Ukraine are in emulation among themselves, and with them Siberia, North Caucasus, the Lower and Middle Volga have begun the campaign for the harvest and for collectivising agriculture.

"Labour heroism and devotion of the workers are also expressing themselves in voluntary increases in the quotas of output, in working on holidays, in the gigantic increase of suggestions at production con-

¹ VKP(b) v Rezolutsiakh (1941), Pt. II, pp. 355-8.

ferences, in the boycotting of idlers and absentees, in struggle to raise the productivity of labour. . . .

"The shock brigades which are being set up in the factories and offices represent the continuation of the best traditions of the Communist Subbotniks. Inspections of production, challenges, examinations, etc., connected with the growing scope of the work of production meetings and conferences, are becoming of enormous importance for the whole cause of the building of Socialism. A new type of Socialist workman is growing in the Soviet works and factories. The rôle and the share taken by the masses of working people in the management of the State is growing. . . .

"Emulation and the Five Year Plan are indissolubly interconnected."

The following month Communists working in all spheres of business activity, and in the trade unions and factories, were given precise indications¹ of what the practical aims of Socialist emulation in the new conditions, as put before the workers for discussion, should be. They included the fulfilment and over-fulfilment of industrial and financial plans and of planned standards of reduced costs and increased productivity; improvement of the quality of output; the struggle against bad work and reduction of overhead charges; the struggle against absenteeism and for model labour discipline; the active effort to secure technically more perfect equipment, the rationalisation of production and the encouragement of workers' inventiveness on the largest possible scale.

Putting this into practice was by no means a smooth and easy process. In the spring and summer of 1929 there was even some decline in the activities of many shock

¹ Resolution of the Central Committee of the C.P.S.U. of 9th May, 1929 (printed in V. I. Lenin, *K Voprosu o Soitsialisticheskom Sorevnovanii*, 1929, p. 61).

brigades,¹ just because the initiative was still in the hands of committees representing Party and youth bodies and managements in the first instance, rather than in those of the trade union organisations in the workshop—the factory and works committees, elected by the general mass of workers. This meant that the element of constant pressure from below upon managements, to ensure fulfilment of production pledges by proper co-operation with the shock brigades, was lacking. In October, 1929, this situation was thoroughly discussed at a meeting between the leadership of the trade unions and the Supreme Economic Council (V.S.N.H.)—the Government department responsible for industry. Following this, the Central Council of Trade Unions sent out twenty-one “brigades” of its leading members, drawn from all the trade union executives—six or seven to each “brigade”—who, together with one or two representatives of the Communist League of Youth and the managements, visited the principal industrial areas to organise an inspection of the economic and political agreements signed. The local trade union organisations in the different industrial areas mobilised 3000 of their best members to help the brigades by their knowledge of local conditions.² The effect of this shake-up from above was reinforced by practical encouragement from the Government. The Council of People's Commissars published a decision that managements must examine workers' suggestions within a

¹ It is noteworthy, however, that on the initiative of workers in the paint-shop of the “Proletarian” railway repair works at Leningrad, an “All-Union Industrialisation Day”—a day of six hours' voluntary labour as a contribution to the Five Year Plan—was held all over the U.S.S.R. on Sunday, 6th August, 1929. See, for an account of the initial challenge printed in *Leningradskaya Pravda* in June, the wave of support from other factories, and proceedings on “Industrialisation Day”, Zhestev and Farfel, *Den Velikikh Rabot* (Leningrad, 1929).

² Olkhov, *op. cit.*, pp. 16, 24–5.

week, and must not postpone adoption of those upon which agreement had been reached with the trade union bodies that they were technically and economically advantageous. It also laid down a scale of bonuses for inventions, varying according to the amount of the economy which they brought: from 30 to 80 roubles bonus, payable within three months, for an invention producing a yearly economy of up to 200 roubles, to a bonus of 2600 to 3000 roubles, payable within six months, for an invention producing a yearly economy of up to 50,000 roubles.¹

The results of these and other measures were most satisfactory. By the end of 1929 there were hundreds of factories in which a large proportion of the workers were members of shock brigades. An investigation by the Moscow trade unions revealed that at 192 local factories employing 135,000 workers there were 2020 shock brigades with just under 22,000 members—one-sixth of the entire labour force.² In the Urals, where on 1st May, 1929, there had been 400 shock brigades with 12,000 members, on 1st December there were 3582 brigades with 52,000 members.³ At an All-Union Congress of Shock Brigaders held in December, 1929, it was reported that there were already 300,000 members of shock brigades in industry—out of a total of 2,900,000 workers.⁴ The proportion of workers attending production conferences grew by the late autumn of 1929 to 79.6%, according to trade union figures;⁵ and on 1st January, 1930, 29% of all Soviet workers were engaged in Socialist emulation.⁶ It is not surprising that the programmes of output, pro-

¹ Popov, *op. cit.*, pp. 50–1, 52.

² *Ibid.*, pp. 21–2.

³ Olkhov, *op. cit.*, pp. 32, 43.

⁴ Webbs, *Soviet Communism*, II, p. 748.

⁵ Olkhov, *op. cit.*, p. 55.

⁶ *XVII Syezd VKP(b)* (1934), p. 548.

ductivity of labour and reduction of costs for the year 1928-29 were over-fulfilled; and a new slogan appeared in the resolutions of factory meetings—"the Five Year Plan in four years!"¹

When the Central Council of Trade Unions and the Communist League of Youth, in January, 1930, called for the enlistment of 500,000 workers in shock brigades as a "Lenin Levy", to commemorate the sixth anniversary of Lenin's death, over a million responded to the call. In many large works by March, 1930, the majority of the workers were members of shock brigades. By now there were not only "shock shifts", i.e., entire shifts of which the workers had joined the shock brigades, but shock departments and shock works.²

Stalin wrote in an article published on 7th November, 1929, that the "expansion of the creative initiative and intense labour enthusiasm of the vast masses of the working class on the front of Socialist construction" was one of the most important facts, if not the most important fact of the year: since it alone could "guarantee the progressive increase of labour productivity, without which the final victory of Socialism over capitalism is inconceivable".³

The movement was expanding now at a speed which justified this confident tone. On 1st March, 1930, there were 2 million workers engaged in Socialist emulation and 1½ million shock brigaders: three-quarters of the metal workers, 70% of the textile workers, over 50% of the coal-

¹ Sorokin, *Sotsialisticheskoe Planirovanie Narodnogo Khoziaistva SSSR* (1946), p. 91.

² Popov, *op. cit.*, p. 22. Graphic details of the work of the shock brigades at this time, and of their effect on output and efficiency, were given in a speech on 25th February, 1930, by Molotov, *The New Phase in the Soviet Union* (London, 1930), pp. 19-23.

³ *Leninism* (1944), p. 295.

miners were engaged in emulation.¹ By now the movement itself was taking a number of different forms, the variety of which was due to the fact that it sprang from the spontaneous initiative of the workers themselves.

Lenin had foreseen this aspect of the coming emulation in his article of January, 1918, which has already been mentioned:

"We must organise the emulation of practical organisers among the workers and peasants with one another. We must fight against every kind of standardisation and of attempts to establish uniformity from above, to which intellectuals are so much inclined. Neither standardisation nor establishment of uniformity have anything in common with democratic and Socialist centralisation. Unity in fundamentals, in what lies at the root, in the essential, is not broken but ensured by *multiformity* in details, in local peculiarities, in methods of *approach*. . . ."²

These words of Lenin's were to be remarkably justified in the years 1929-33, when the Soviet working class, and that substantial proportion of the Soviet peasantry who joined the collective farms in these years, first had brought home to them their own personal and collective responsibility for planning the economy of their country.

4. UNITY IN MULTIFORMITY, 1929-33

The first and basic form, as already evident, was the *shock brigade*, directly responsible for a group of machines, a particular part of a factory, a particular department of an office, some part of the work on a collective farm, and so forth.

¹ Shvernik, *Trade Unions of the U.S.S.R. and their Role in Building Socialism* (Moscow, 1930), p. 13.

² *Works*, 3rd Russian edn., vol. xxii, p. 166.

"A shock brigade represents a group of people working on a job who agree to fulfil the plan of output in the shortest possible time. The members of the shock brigade undertake to render each other mutual assistance in their work—to observe implicitly all the rules and regulations of order and labour discipline—to handle carefully raw materials and tools—to participate actively in the rationalisation of production and improvement in the quality of output, etc. Socialist emulation takes place both inside the shock brigade (individual Socialist emulation), and between different shock brigades. . . . The most popular form of shock work is the shock brigade group of about ten workers."¹

In April, 1929, as we have seen with the example of the Tver-Moscow-Ivanovo agreement, came the new stage of *economic and political agreements* signed between undertakings.

"These agreements usually include obligations to eradicate absenteeism on the part of the emulators themselves, and to fight against it among the other workers—to put an end to stoppages of machinery, and to utilise working hours fully, in order to improve and increase output according to plan—to eliminate waste due to negligence—to reduce costs of production—to prevent waste of raw materials, stipulating the exact amount of saving to be made."²

In 1930 came the *chain shock brigade*—a movement first begun at the agricultural machinery works at Rostov-on-Don.

"The job of manufacturing the 24-row seeder for tractors for the first time in the U.S.S.R. was an extremely difficult one. At that time a suggestion was made at the works to organise a single shock brigade for the manufacture of tractor seeders,

¹ Aluf, *Development of Socialist Methods and Forms of Labour* (Moscow, 1932), p. 14.

² *Ibid.*, pp. 15-16.

beginning with the designing bureau and ending with the assembly shop. This brigade was called a 'chain' brigade. Through the combining of the several shock brigades, the chain brigades secured maximum harmony in the manufacture of separate parts of the machine in the various shops of the plant—pattern-making, foundry, forge and wood-working. Links of the chain brigade were formed in each of these shops."

About 2000 workers took part in this chain brigade, which brought about a remarkable increase in output.

The example of the Rostov works was followed by that of the Karl Marx engineering works at Leningrad, the great Moscow electrical engineering works (Electrozavod), the railway-carriage works at Mytishchi and many others.¹ This form of organisation—congenial to a large industrial undertaking—proved very useful in enlisting the interest and co-operation of the technicians.

In May, 1930, yet a new form appeared—that of the *social tug*, in which a factory which is working better than others comes to the aid of those lagging behind, as a tug-boat comes to the aid of a vessel that has run aground. Obviously such a form of voluntary effort could only appear in a system where there was no question of industrial secrets, or of beating one another out of the market. It was begun by the miners of the Artem colliery in the North Caucasus. In 1914, under capitalist management, the pit had achieved a record daily output of 1300 tons. In 1930 it reached a figure exceeding 2300 tons. Learning that a neighbouring pit—the "October Revolution"—was falling behind on all its schedules, and was producing 700-900 tons per day instead of the programme figure of 1200 tons, the Artem

¹ Aluf, *Development of Socialist Methods and Forms of Labour* (Moscow, 1932), pp. 27-9, and Shvernik, *op. cit.*, p. 15.

miners decided to "take them in tow". The towing brigade was composed of four shock brigaders, two engineers, a member of the pit committee, the pit manager, the secretary of the local Party Committee and journalists from two local papers. They carefully studied conditions in the lagging pit, established what was wrong, and persuaded the management of the "October Revolution" colliery to take them on its strength. By insisting on short conferences of technical and managerial staff after each shift, to discuss causes of breakdowns; by making suggestions for better working methods, at shift meetings of the workers; and by setting a personal example themselves, the towing brigade in forty days completely transformed the situation at the backward pit. Not only did the latter begin to produce its full quota, but hundreds of its workers became shock brigaders themselves.¹

Similar methods were used thereafter, not only as between enterprise and enterprise, but within the same factory, as between shop and shop. "When the shock brigaders who toured Europe on the 'Abkhazia'" (as a reward for good work) "returned to the U.S.S.R. via Odessa, they organised a brigade of ten workers to help certain shops in Odessa that were lagging behind."²

In the summer of 1930 the movement took yet a further stride forward, by the appearance of the *industrial and financial counterplan*. This was, perhaps, the most significant development of all. The draft plan which is passed on to every works by the State trust of which it is a part, or by the central organisation to which the works is subordinated, indicates the quantities of raw material and fuel, the amount of equipment and of cash, with which the works will be credited during the year. It also lays

¹ Aluf, *op. cit.*, pp. 31-3.

² *Socialist Industry in the U.S.S.R. Victorious* (Moscow, 1931), p. 22.

down the quantity and quality of output, its assortment and prices and the productivity of labour expected. The counter-plan aimed at correcting this draft, by subjecting it to careful discussion in every shop or department, section by section. In the course of the discussions agreement was reached as to better use of the cash and materials supplied, better use of the machinery, and methods of securing a higher productivity of labour. Thus there were opened up hidden reserves in the working of the factory, which those who were planning from above could not see. The experience of the workers themselves, and the pledges they themselves had taken in their various Socialist emulation agreements, were the source from which the workers' suggestions were drawn.

This movement was started by the Karl Marx engineering works at Leningrad. During the first year of its operation the workers came to the conclusion (for example) that the foundry was able to turn out 14,500 tons instead of 11,000 tons, and the first mechanical shop could produce 200 warp-frames a month as against 150 planned by the management.

At the Moscow Electroavod the workers, by counter-planning, raised the draft plan for 1931 from 136 million roubles' worth of output—including everything from sparking-plugs and electric bulbs to giant turbine equipment—to 178 million roubles. This was done during after-hours meetings in the different shops (some of which the present writer was privileged to attend), which went on for several days. Moreover, the works fulfilled its plan that year early in December, which meant that for the whole of 1931 the counter-plan was over-fulfilled.

In the building of the great Dnieper Dam, the plan had been to pour 427,000 cubic metres of concrete, and the workers put forward a counter-plan of 500,000 cubic

metres; but the fulfilment of the counter-plan revealed that 518,000 cubic metres had been poured in the time originally allotted for 427,000 metres.

The counter-plan of the Urals-Kuzbass iron and steel works was discussed by tens of thousands of workers in its various sections; and in response to the "loan" of workers' suggestions "issued" by the Urals Regional Trades Council, over 5000 rationalisation suggestions were received, some of them effecting an economy of over 1 million roubles.¹

Counter-planning also developed in the collective farms, by extending tilled areas, raising yields and using machinery better.

At a plenary meeting of the State Planning Commission in April, 1931, its chairman, V. V. Kuibyshev, said that counter-planning had become a powerful movement in recent months, and represented "one of the most genuine forms of the struggle of the working class to fulfil and over-fulfil the plan, to economise to the utmost and to mobilise all the internal resources of industry. The experience of the drawing-up of industrial and financial counter-plans at factories in 1930 and 1931 displayed the highest degree of political and economic maturity of the working class. The participation of the masses in the working out of yearly and quarterly plans during this period has revealed exceptional models of genuine planning work, which in a number of cases was qualitatively in no way behind the work of the planning departments of trusts and State planning bodies."²

As a natural development from the counter-plan came the *cost-accounting brigade*—again from Leningrad. The

¹ Aluf, *op. cit.*, pp. 34-7. *Ninth Congress of Trade Unions* (Moscow, 1933), pp. 39-43.

² Kuibyshev, *Stati i Rech*, vol. v, p. 97.

aim of this organisation, as its name implies, was to improve the quality of output by bringing to bear the method of "rouble control" on the work of each individual member. As a rule, it was organised within the framework of a single shift. By the agreement made between the cost-accounting brigade and the management of the shop or factory—its own variety of counter-plan—the brigade undertook to fulfil and exceed the "order" placed with it by the head of the shop. In this "order" the quantity and cost of materials required for the period of the agreement (from one day to one month), the time and method of supply, the standards of consumption of raw materials, equipment, semi-finished goods, tools, etc., the wage funds available for time-work, the quality and quantity of output, the allowance for absenteeism and waste, were all indicated by precise figures, and the workers undertook obligations accordingly.

At the IX Trade Union Congress in 1932 the cost-accounting brigades were described by N. M. Shvernik, then general secretary of the Soviet Central Council of Trade Unions, as "the basic form of Socialist emulation, the most highly perfected form in which the labour of a given enterprise can be organised. . . . Cost accounting brigades fully ensure that the worker exercises due influence upon the course of production, and solve the problem of teaching millions of workers how to control national economy." He reported that, whereas at the beginning of February, 1931, there were only ten cost-accounting brigades in the U.S.S.R., comprising 130 workers, by 1st April, 1932, their number had increased to 155,000, with a membership of about 1½ million workers. At Leningrad, where they had started, no less than 70% of the workers were members of cost-accounting brigades; at Moscow there were 30,000 such brigades with 400,000

members, and in Ukraine 25,000, with 300,000 members.¹

By this time the Socialist emulation movement as a whole had grown enormously. At the end of 1931 there had been about 2½ million shock brigaders: by the end of 1932 they numbered 4 millions.² In the fourth quarter of 1931 alone the unions had organised 82,532 production conferences in factories, attended by over 2½ million people. In 1930, 273,000 rationalisation proposals had been made by the workers, and in the realisation of rather less than half of them economies exceeding 41 million roubles had been achieved. In 1931 the workers had made 542,000 rationalisation proposals, and putting into effect only one-third of them had brought economies of over 143 million roubles.³ Everything that had been said and written about the supreme importance of Socialist emulation in harnessing the intelligent co-operation of the people, not only in work, but also in planning their work, was coming true.

Emulation had also extended to the peasantry. In 1929 one of the weaving factories at Ivanovo was challenged by a small village called Seltso, in the province of Kostroma. Crop rotation and proper use of grasses were in a bad way in this village; and a group of younger peasants who often went to town for work in factories persuaded their village meeting to send the following letter of challenge to the weaving factory:

"We peasants of the village of Seltso challenge you to a competition. We promise to increase the harvest and to conduct our farming in a more rational way, with the aid of an agronomist, while we request that you in turn should produce calico of better quality and at a cheaper price."

¹ *Ninth Congress of Trade Unions* (Moscow, 1933), p. 31.

² *Ibid.*, p. 145.

³ *Ibid.*, p. 44.

The letter was read at the factory meeting on 13th April, 1929, causing much surprise. In the course of discussion as to how emulation with a village could be organised, it was pointed out that the factory should have economised 495,000 roubles on the year's programme so far, and had not achieved even half the amount. The meeting elected three workers to go to the village and sign a contract, which was duly concluded. The factory promised to raise productivity by 11%, lower the amount of bad work from 8% to 4%, reduce waste by at least half, do away with all wilful absenteeism, keep an account of the production of every loom, and thus lower costs by 7%. On the other hand, the peasants undertook to increase their contract with the State for sowing of flax from 43 acres to 72 acres, including 12 acres which should be farmed collectively; to buy agricultural implements out of the profits from the collectively farmed land, and by better farming to raise their harvest by 7%.¹

Other examples of this kind of emulation may be found in the Webbs' *Soviet Communism* (volume II, p. 738).

The political and economic significance of the new phase of Socialist emulation was emphasised by Stalin in his political report to the XVI Congress of the C.P.S.U. in 1930:²

"It can now no longer be doubted that one of the most important facts, if not the most important fact, in our construction is at the present time the Socialist emulation of factories and works, the roll-call of hundreds of thousands of workers in respect of the results achieved in emulation, and the widespread development of the shock movement. Only the

¹ Mikulina, *Socialist Competition of the Masses* (Moscow, 1932), pp. 41-3.

² Stalin, *XVI Party Congress* (1930), pp. 99-100, 152.

blind can fail to see that a tremendous revolution has taken place in the psychology of the masses and in their relation to labour, which has radically altered the features of our factories and works. Not so very long ago there could still be heard among us voices talking of the 'artificiality' and 'impracticability' of emulation and the shock brigade movement. Today these 'sages' don't arouse even a jeer: they are treated merely as 'sages' who have outlived their day. The cause of emulation and the shock movement today is a cause which has been won and consolidated. . . .

"The most remarkable feature of emulation consists in the radical revolution it has wrought in men's views of labour, because it transforms labour from a disgraceful and painful burden, as it was reckoned before, into a matter of honour, a matter of glory, a matter of valour and heroism. . . .

"It would be foolish to think that our working class, which has gone through three revolutions, would accept intensification of labour and the mass shock brigade movement in order to manure the soil of capitalism. Our working class has accepted the intensification of its labour, not for the sake of capitalism, but in order finally to bury capitalism and build Socialism in the U.S.S.R."

The results of the first Five Year Plan examined in the first chapter were regarded by Soviet leaders, among other things, as the supreme victory of the Socialist emulation movement. It was not only the result in quantity—evaluated at 96.4% of the plan for industry, according to the final figures given by Molotov at the XVII Congress of the C.P.S.U. in 1934—but also the increase in labour productivity that was used at the criterion. This amounted to over 41% by the end of 1932.¹ True, the

¹ Molotov, *Tasks of the Second Five Year Plan* (Moscow, 1934), pp. 21, 118.

plan had provided for a much greater increase (by the end of 1933)—110%. But the tremendous recruitment of workers from the countryside (man-power in industry increasing roughly from 11 millions to 22 millions—more than 50% above what had been planned) meant that the factories had been diluted with millions of workers at a less advanced level of political development than those who had brought Soviet industry to the 1913 level before the Five Year Plan was started. To achieve such a big general increase in productivity, in these circumstances, was a substantial success. Moreover, non-fulfilment of the plan in this respect was compensated, as Stalin pointed out later, by the training of this new labour force to handle the most modern machines from the very outset: which would be of great value in the next Five Year Plan.

Reporting on the results of the first Plan at the Central Committee and Central Control Commission of the C.P.S.U., in January, 1933, Stalin declared that without the "activity and self-devotion, enthusiasm and initiative" of the workers, technicians and collective farmers in developing Socialist emulation and shock work, "we could not have achieved our goal".¹

In the fulfilment of the second Five Year Plan yet wider horizons opened before the millions engaged in Socialist emulation; and the result was still more important than in the previous four years. To begin with, the idea of the counter-plan and that of the cost-accounting brigade played a prominent part from the outset in the discussions of the new Five Year Plan, instead of being reached by stages, as they were before. The consequence made itself felt already in 1933, by the appearance of the movement for *technical, industrial and financial plans*, produced by the method of counter-planning from below. Molotov spoke

¹ *Leninism* (1944), p. 439.

of this, in the report to the Party Congress of 1934 already mentioned, as a movement, started in a number of Leningrad factories, which was "worthy of imitation":¹

"The technical, industrial and financial plan, in the drawing up of which not only the economic and technical personnel participate but also all the workers in the factory, who test the technical and productive capacity of each department, each stage and each machine, and thereby actively participate in discovering the productive resources of the given factory, is one of the finest Socialist forms of struggle for our rate of development. This idea of a technical, industrial and financial plan cannot be reconciled with the old habit of economic administration 'in general'; it heightens the sense of responsibility of every worker for his factory—and therein lies our great strength."

The construction of such plans, indeed, meant that the workers had to consider the technical side as well as the economic and labour side of production. This, of course, presupposed just such a vast army of workers, more or less familiar with modern machinery, as had been produced; on the other hand, it developed in them a much more profound knowledge of their machines and of technical processes than before. Without the stimulus of a personal interest in matters of public importance it could scarcely have developed.

One of the first examples was at the "Svetlana" Works at Leningrad. More than 2000 workmen took part in drawing up the technical, industrial and financial plan, jointly with the technicians. The work involved issuing "passports" for each machine-tool, or in other words ascertaining all its productive possibilities as well as its

¹ Molotov, *op. cit.*, pp. 47-8.

peculiarities; planning the replacement of out-of-date machines by more modern, automatic machine-tools; working out more precisely the different stages in the process of manufacturing every item of the output of the works; investigating possibilities of better use of works space, power and coal, and transport inside the works; fixing higher qualities of output; proposals for replacing imported materials by those produced at home; organising the use of man-power and methods of management more rationally. As a result, the workers economised man-power in their counter-plan by 1141 workers, compared with the draft coming from above; they raised productivity by 30% above what had been planned; they reduced costs by almost 10% above what had been required, and they reduced the demand made by the works for imported materials from 1½ million roubles to 63,000 roubles. The example was widely followed; and Kirov, one of the outstanding leaders of the C.P.S.U., described the movement as "a model of the true Socialist organisation of labour, a genuine bit of Socialism".¹ It was of vast importance, he declared, "from the point of view of eliminating the gulf between manual and intellectual labour, because the worker, when actively taking part in planning production, really does rise to the level of the creative management of his machine, his shop and of the whole works in its entirety".

At the end of 1933 three-quarters of the nearly 23 million industrial workers and employees were engaged in Socialist emulation, and the number of shock brigaders in industry exceeded 4 millions. One-third of the workers were members of "cost-accounting brigades".²

¹ Sorokin, *op. cit.*, pp. 94-5.

² Abolin, *October Revolution and the Trade Unions* (Moscow, November, 1933), p. 31.

5. STAKHANOVITES IN PEACE AND WAR, 1935-45

In 1935 the movement rose to an entirely new height with the appearance of the Stakhanov movement. The essence of this has often been described. It was begun by a Donetz miner, Alexei Stakhanov, who on 31st August, 1935, re-arranged by agreement the jobs of an entire group of miners at his work-place, so as to ensure the use of modern coal-cutting machinery to the full, the fullest possible employment of skilled workers at their own speciality, and the most rational division of labour between the hewer, the filler, the propper, and so forth. By doing so his shift produced 102 tons instead of the 7 tons which had been the quota, without anyone having to work harder or more exhaustingly than before. The net result was that the pit as a whole, which used to produce from 900 to 980 tons a day, increased its output to 1200 tons. Stakhanov said of this experience: ¹

"I must say that there were plenty in our own pit who wouldn't believe at first that I could have cut 102 tons in a shift. There must have been a mistake in adding up his figures, they said. We had to get this firm, we had to show all the doubters that you could get 102 tons and more without a big strain, providing only the work were properly organised. So on 3rd September the Party organiser of the stretch where I was working, comrade Dyukanov, went down into the pit. This stretch is called 'Nikanor East'. Dyukanov worked one shift and got 115 tons. But they didn't believe Dyukanov all at once, either. We had to send another man down. And the third to go cutting in the pit was a member of the Communist League of Youth, Kontsedalov,

¹ *Pervoye Vsesoyuznoe Soveshchanie . . . Stakhanovtsev* (1935), pp. 12-13.

who put up a new record—125 tons. A few days later I beat my own and their records, cutting first 175 tons, and then 227, in one shift. Of course my record would have remained just a record, if the practical conclusions had not been drawn at once from it for the whole district, the whole pit. Everyone realised that you could so organise the work as to use the pneumatic drill 100%, and so as to surpass existing output of the hewer several times. You had only strictly to specialise the workmen: the hewer must cut and the propman prop, and the lengths of ledge must be made larger."

Immediately the principle underlying Stakhanov's initiative—a new approach to the rational organisation of the labour process—spread to other industries. The names of a blacksmith, Busygin, in the motor industry, of a milling-machine operator, Gudov, in the machine-tool industry, of the weavers, Maria and Yevdokia Vinogradova in the textile industry, of a driver, Krivonos, on the railways, of a leather-worker, Smetanin, of Maria Demchenko and Pasha Angelina in agriculture, and of many others became famous for the appropriate changes they made in their respective fields of work. By the end of the second Five Year Plan, 25% of all the workers were engaged in the Stakhanov movement.¹ On the railways alone there were over 560,000 Stakhanovites.²

The effect on output was extraordinary. In the first year of the movement—1936—industrial output achieved a record increase, even by Soviet standards, of 30.2%.³ The aggregate output of industry over the five years

¹ See Chapter I. A lucid description was given by practical British miners in *A Visit to Russia* (Durham Miners' Association), 1937.

² Kaganovich at XVIII Party Congress, 14th March, 1939 (printed in English in *Land of Socialism Today and Tomorrow*, Moscow, 1939, p. 342).

³ Lokshin, *op. cit.*, p. 57.

increased by 121%, instead of the 114% which had been planned.¹

Moreover, to a considerable extent this was due to a phenomenal rise in the productivity of labour. This time plans were over-fulfilled in that sphere too. The anticipated increase had been 63% in industry: in fact, it rose by 82%.² Productivity of labour in the building industry had been planned to rise by 75%: in fact it grew by 83%. In heavy industry between 1930 and 1934 productivity increased by 30.7%, while from 1934 to 1938 it rose by 78.6%.³ This was the return on the big capital expenditure, in all senses, of the first Five Year Plan.

At an All-Union Conference of Stakhanovites held in Moscow in November, 1935, Stalin had made the following observations on the nature of the new movement:⁴

"Wherein lies the significance of the Stakhanov movement?"

"Primarily in the fact that it is the expression of a new wave of Socialist emulation, a new and higher stage of Socialist emulation. . . . In the past, some three years ago, in the period of the first stage of Socialist emulation, Socialist emulation was not necessarily associated with modern technique. At that time, in fact, we had hardly any modern technique. The present stage of Socialist emulation, the Stakhanov movement, on the other hand is necessarily associated with modern technique. The Stakhanov movement would be inconceivable without a new and higher technique. . . .

"Further, this movement is breaking down the old

¹ Molotov at XVIII Party Congress (printed in English *ut supra*, p. 105).

² *Ibid.*, p. 140.

³ Kaganovich, *ut supra*, p. 308.

⁴ *Leninism* (1944), pp. 546, 547, 548-9.

views on technique, it is shattering the old technical standards, the old designed capacities and the old production plans, and demands the creation of new and higher technical standards, designed capacities and production plans. It is destined to produce a revolution in our industry. That is why the Stakhanov movement is at bottom a profoundly revolutionary movement. . . .

"Its significance lies also in the fact that it is preparing the conditions for the transition from Socialism to Communism.

"The principle of Socialism is that in a Socialist society each works according to his ability and receives articles of consumption, not according to his needs but according to the work he performs for society. This means that the cultural and technical level of the working class is as yet not a high one, that the distinction between manual and mental labour still exists, that the productivity of labour is still not high enough to ensure an abundance of articles of consumption, and that as a result society is obliged to distribute articles of consumption, not in accordance with the needs of its members, but in accordance with the work they perform for society.

"Communism represents a higher stage of development. The principle of Communism is that in a Communist society each works according to his abilities and receives articles of consumption, not according to the works he performs, but according to his needs as a culturally developed individual. This means that the cultural and technical level of the working class has become high enough to undermine the basis of the distinction between mental labour and manual labour, that the distinction between mental labour and manual labour has already disappeared, and that productivity of labour has reached such a high level that it can provide an absolute abundance of articles of consumption: and as a result, society is able to distribute these

articles in accordance with the needs of its members. . . .

"The elimination of the distinction between mental labour and manual labour can be brought about only by raising the cultural and technical level of the working class to the level of engineers and technicians. It would be absurd to think that this is not feasible. It is entirely feasible under the Soviet system, where the productive forces of the country have been freed from the fetters of capitalism, where labour has been freed from the yoke of exploitation, where the working class is in power, and where the younger generation of the working class has every opportunity of obtaining an adequate technical education. . . .

"In this connection, the Stakhanov movement is significant for the fact that it contains the first beginnings—still feeble, it is true, but nevertheless the beginnings—of precisely such a rise in the cultural and technical level of the working class of our country. . . . Today the Stakhanovites are still few in number, but who can doubt that tomorrow there will be ten times more of them?"

As though to emphasise the latter point, the increase of productivity in State industry during the first three years of the third Five Year Plan (1938–40) was a further 38%¹—thus keeping abreast of the programme for the whole period (an increase of 65% by 1942).

It was in war-time, however, that the dependence of the entire economic and political structure of the U.S.S.R. upon the active attention of its working class to its own affairs was brought out most sharply.

The war produced some problems for Soviet industry

¹ A well-known economist, S. Turetsky, in *Izvestia*, 29th May, 1947, gives the total increase in labour productivity between 1928 and 1940 as "exceeding 350%".

which were familiar to other countries, such as the need for a great expansion of war production, for the adaptation of existing factories and building of new plant, and for the training of millions of women and young people to take the place of workmen called up for military service. But in addition there were vast problems peculiar to the U.S.S.R. Thirteen hundred factories, as we have seen, had to be moved from west to east, and re-started on the new sites as rapidly as possible (in fact, the factories began production at the new sites usually three or four weeks after their arrival, and within two or three months were producing more than before the war).¹ Unlike other countries which could rely upon mass imports of finished high-quality war material, the U.S.S.R. to expand its armaments had to expand its production of the basic semi-finished requirements of the war industries—coal, iron and steel, electric power—on a vast scale (in fact 200 new coal-pits were sunk, 24 blast furnaces, 128 open-hearth steel furnaces, 56 rolling mills and 67 coke batteries were built, and many new power-stations put up).² This was all the more pressing because the German invasion deprived the U.S.S.R., for a considerable time, of areas which before the war produced two-thirds of its coal and 60% of its steel. It was no small problem of the U.S.S.R., moreover, that as its armies liberated parts of its territory, from the end of 1941 onwards, it had to cope with devastation such as the other Great Powers were spared: which imposed an additional strain on Soviet industry long before the war ended.

None of the problems mentioned, and of the direct tasks which followed from them—such as full use of the new

¹ Lokshin, *op. cit.*, p. 90.

² *Planovoe Khozyaistvo*, No. 3, 1946, p. 22: and Voznesensky, *Voyennaya Ekonomika SSSR* (1947), p. 46.

machinery, repairs to machine tools at the great new works in the Urals, the Siberian steppes and the plains of Central Asia, instead of sending them away, the introduction of the conveyor system and the raising of labour discipline—could have been solved successfully without the continuation of Socialist emulation on a large scale. This took a number of different forms.

One was that of the 200 *percenters*, and later 500 *percenters*—and even 1000 *percenters*—workers who undertook to produce so much more than their quota of output in the standard time, by better mastery of their machine. Another form was the young people's *front-line brigade*. This movement, begun by a girl operative, Yekaterina Baryshnikova at the 1st State Ball-Bearing Works in 1943, aimed at increasing output of each brigade with the object of reducing the number of workers employed on each job, and thus making more workers available for other jobs. By the end of 1944 there were 70,000 such brigades, grouping about 500,000 young workers. There were more than 100,000 youth brigades by the end of the war.¹ Another form was that of *public inspections* of the organisation of labour, thus borrowing a method used in earlier stages of Socialist emulation: moreover, apart from this method of checking up on output and technique, the trade unions enlisted the help on a voluntary spare-time basis of some 600,000 *public inspectors* of factory canteens, bakeries, crèches, laundries and other amenities necessary for the encouragement of the war workers. Yet another form was the *multi-lathe* movement—i.e., the working of two or more machines simultaneously by the same worker (e.g., gun-borers at Leningrad). It aimed not only at increased productivity of labour but also at economising

¹ Gatovsky, *Ekonomicheskaya Pobeda Sovetskogo Soyuza* (1946), p. 81; also Lyapin, *op. cit.*, p. 32.

labour itself. The movement had made its appearance first in 1939, at the Urals engineering works and the Kharkov machine-tool works; but it found rapid extension in war-time. Tens of thousands of workers took part in this effort. At one war works there were over 1000 *multi-lathe* workers in 1944: in the textile industry a great number of new weavers adopted this method.¹

Another form of great importance was the *assistance given to less skilled workers* by the more skilled. Thus at the Ordzhonikidze machine-tool works a trade union organiser and skilled engineer, Zaitsev, helped eight new workers, mostly women, to raise their skill, and by 1943 they were regularly exceeding their quota by 50–60%. At the Stalin motor works, Ryabikina, in the armature department, was not managing her quota. The shop committee appointed a Stakhanovite, Kuzina, to give her technical assistance, and after a few months Ryabikina was turning out regularly more than double her quota.² In 1943, at special “Stakhanov schools” set up for this purpose in the factories themselves, there were 63,000 workers being trained in the aircraft industry by their fellow-workers, 43,000 in the armaments industry, 38,000 in the munitions industry, 41,000 at the big building jobs in the Urals and Western Siberia, etc.³

Yet a further subject of emulation was the making and collecting of *inventions and rationalisation proposals*. In the munitions factories during the second half of 1942 there were 24,000 such suggestions, and putting into effect only one-third of them produced an economy of 259 million roubles. In 1942 tank works produced over 15,000

¹ Lokshin, *op. cit.*, p. 110; and Lyapin, *op. cit.*, p. 30.

² Data supplied by favour of the Soviet trade union delegation to Great Britain (1943).

³ Lokshin, *op. cit.*, p. 111.

workers' suggestions, with a total economy of over 71 million roubles. In various railway workshops 4000 suggestions were made, of which just over 1600 were adopted, leading to economies exceeding 17 million roubles per annum.¹

Another variety of Socialist emulation was the adoption of detailed plans, similar to the "economic and political agreements" of 1929, in the shape of *open letters to Stalin*, which were discussed, amended and adopted at mass meetings of the workers concerned. Thus, on 1st January, 1942, 1 million workers, collective farmers and technicians of the Urals signed New Year greetings to Stalin, pledging various increases in their output. On 25th July, in a further letter, 1,275,000 Urals people reported that their pledge had been fulfilled by the doubling and trebling of their output of arms and munitions, and promised to increase output by a further 150% in the second half of 1942.

By the middle of 1944 the position in the basic war industries was that in the production of armaments, ammunition and aircraft the numbers engaged in Socialist emulation exceeded 85% of all workpeople, and Stakhanovites 38%. In other industries, such as oil, iron-ore and medium engineering, the numbers engaged in Socialist emulation also varied from 80 to 87%. Over the whole of industry, by the summer of 1944, more than 35% of all workers were Stakhanovites.² Labour productivity as a result, and in spite of the great influx of previously un-

¹ Data of Soviet trade unions, *ut supra*. One method adopted in the tank industry, and associated with the name of its initiator Yegor Agarkov, was to combine into one job operations which had hitherto been broken up into two jobs or more. The larger brigade, or production section, began to turn out more work, with the same efficiency, but with fewer workers.

² Article by A. Lyapin in *Propagandist* (February, 1945); Gatovsky, *op. cit.*, p. 77.

skilled or semi-skilled workers, rose from May, 1942, to May, 1944, by over 40%, and in some industries considerably exceeded this figure, reaching 54% in the munitions industry. At the same time very great economies were secured. The Stalin artillery works alone, for example, economised during the war 100,000 tons of iron and steel, 3000 tons of non-ferrous metals and over 30,000,000 kilowatt hours of power output.¹ In 1943 the level of overhead charges at most war factories was 30-40% lower than at such factories before the war.² We have seen earlier what vast economies were secured in the country as a whole.

With the end of the war the tasks of rebuilding what had been destroyed and of resuming the advance towards real abundance became even more closely dependent upon the deliberate and planned effort of the Soviet citizen himself than was Soviet planning before 1941. No Government, no machinery of State, could possibly be adequate to cope with the vast destruction left behind by the Germans. Furthermore, as we have already seen, the question of assistance to the U.S.S.R. in repairing this destruction (even allowing for UNRRA aid) occupied a much more humble place than that of assistance to Germany, in the only countries able to give any help from outside. The responsibility of the individual citizens for the bulk of reconstruction in the U.S.S.R. was therefore inescapable. Perhaps the most graphic form in which this was brought home to them on a national scale—every liberated district, of course, provided its parallels—was the beginning of the rebuilding of Stalingrad in 1943, immediately after its liberation.

Assistance to Stalingrad, in kind and in labour, became

¹ Lokshin, *op. cit.*, pp. 105, 111.

² Turetsky, *Rezhim Ekonomii v Usloviakh Voyny* (1944), p. 25.

a matter of honour and emulation almost immediately.¹ 20,000 volunteers from all over the U.S.S.R., organised in 1084 "Cherkasova" brigades (named after Alexandra Cherkasova, the young girl who began the movement, a bricklayer by profession), repaired and restored, in the course of 1944 alone, a large number of schools, twenty-three crèches and kindergartens, thirty individual houses; but above all took an active part in the rebuilding of the Stalingrad water-works, tram service, river-port and railway lines. In the following year such volunteers repaired 11,000 houses and 275 schools, shops and restaurants. Millions of roubles' worth of clothes came from the workers of the great textile centre of Ivanovo, window-glass by the trainload from the ancient glassworks at Gus-Khrustalny, 100,000 text-books from school children in other towns.

Nor was voluntary effort of this kind confined to Stalingrad. In the Kursk region Deputy Volchkov reported at the Soviet of the Union on 27th April, 1945,

"workers, employees, housewives are taking training in the building trades, gladly giving their labour for the repair of factories, social and cultural institutions, dwelling houses. At Kursk alone, in 1944, there were 1540 volunteer building brigades at work, composed of 27,000 people. . . . An important part in drawing the townspeople into restoration work—particularly housewives—is played by the street committees. I should like to describe the work of one of these street committees on Komsomol Street at Kursk. . . . The committee has four volunteer

¹ Details of the work of the Cherkasova brigades are given by Buzyrev, *Vosstanovitelnye Raboty i ikh Finansirovanie* (1945), p. 74. Particulars of gifts from other parts of the U.S.S.R., taken from the Soviet press by the writer, are quoted from ch. 292, on Soviet home affairs in 1943, contributed by him to *The Second Great War* (March, 1945).

building brigades, 44 people in all, each of whom has worked over 400 hours. The brigades have repaired 60 dwelling-houses and schools. One of the brigade-leaders, comrade Voronina, a housewife 65 years of age, personally worked 866 hours last year."¹

It was in 1946, however, with the adoption of the fourth Five Year Plan, that post-war emulation developed on the widest scale. The declared aim was to over-fulfil the Plan in the time provided. It began as a result of a conference of blast-furnacemen and steel smelters from all over the Union, held at Magnitogorsk, in the Urals, in the second half of May. Out of the exchange of war-time experiences and arrangements for mutual aid discussed there, the metallurgical workers of three big plants—the Kirov works at Makeyevka (in the Donetz Basin), the Kuznetsk works in Western Siberia, and the Magnitogorsk plant—decided to initiate a new round of Socialist emulation. Their example was followed by hewers in the Donetz and Moscow coalfields, by blacksmiths at the motor works of Gorky and Moscow, and then by workers in other industries, as well as by collective farmers and other workers in agriculture.

From the outset a determined effort was made to put this movement on the highest level reached at any time in the history of Socialist emulation. On 8th June, 1946, the Central Council of Trade Unions issued the following conditions which a factory must satisfy to be adjudged "victorious" in this campaign: (i) systematic over-fulfilment of production plans as regards quantity; (ii) uniformly high quality of output, and of the types provided for by the plan; (iii) the mastery of new branches of production, not previously undertaken by the competing works; (iv) increase in productivity of labour

¹ *XI Sessia Verhovnogo Soveta SSSR* (1945), p. 247.

and reduction of costs, and housing and cultural construction according to plan; (v) good work, on the part both of managements and trade union organisations in the factories, in the sphere of labour protection and welfare measures.¹ A recurring theme of the campaign was that in the fourth Five Year Plan the total increase in industrial output by 1950 must represent 48% of the 1946 level, while the amount by which labour productivity must increase was 36%—i.e., it was to account for three-quarters of the total improvement of output.

6. POST-WAR SOCIALIST EMULATION

Towards the end of 1946 the summing-up of results of the year's working began to reveal, not only solid successes in all the spheres mentioned, but a wide variety of types of emulation, recalling its first full flowering during the historic years from 1929 to 1932. The following examples, taken for the most part from the news-columns of *Pravda*, tell their own story in this respect:

Individual emulation.

"Workers of the Moscow tool works are successfully competing in the post-war reconversion of production. The pre-war level of output of tools has now been exceeded by 25%. In all shops there is a lively emulation of Stakhanovites and shock brigaders for the title of the best worker in their respective craft. The emulation is bearing good fruit. Productivity of labour has grown considerably, and exceeds the level laid down by 10%. A number of shops, with their previous number of workers, are turning out 20-30% more output than at the beginning of the year" (23rd November, 1946).

Youth Brigades. A message from Gorky reports progress

¹ See, for further details, *Planovoye Khoziaistvo* (1947), No. 3.

at the Molotov auto works, where the "front-line brigade" movement first began in the autumn of 1941, on the initiative of the charge-hand of a toolmakers' group, Vasili Shubin, a member of the Communist League of Youth. There are over 200 of these brigades at the works now, renamed "youth brigades". The message continues:

"When emulation began for the fulfilment and over-fulfilment of schedules in the first year of the new Five Year Plan, Vasili Shubin suggested that emulation be organised between the youth brigades for the title of 'labour valour brigade'. The management and the works committee of the C.L.Y. supported the proposal. The title is granted to those brigades which, in the course of a month, over-fulfil the production standards, and each member of which individually does the same. A red banner for the winning brigade and twelve money prizes have been established. On the initiative of the tool-makers, Socialist emulation has developed throughout the shops, in honour of the fifteenth anniversary of the founding of the works on 1st January, 1932. Eleven youth brigades have already won the title." (22nd November, 1946.)

Rationalisation.

"Some 30,000 practical suggestions for rationalisation of production were submitted this year by workers of the leading branches of industry in the U.S.S.R.—iron and steel, engineering, railways and water transport. Their application resulted in an economy of almost 400 million roubles. Many of these proposals are of great value. For example, at the Dnepropetrovsk iron and steel works a workman, Nikolai Astapov, applied a new method of handling the rolling-mill, and produced 7000 tons of sheet steel per month instead of the usual output of 4500 tons." (*Soviet Monitor*, 30th December, 1946.)

The multi-loom movement. Maria Volkova, a weaver at Orekhovo-Zuyevo, writes:

"The thought of multi-loom work came to me almost a year ago. I talked it over with my friends, and we decided jointly to take on an additional amount of machinery. At first we looked after 10 weaving looms each, then we went on to 12, later to 14, and now we have begun to look after 16 looms each. According to the year's programme we should have given the country 190,000 metres of cloth. We completed this by 15th August. By the 29th anniversary of the Revolution we produced another 85,000 metres, thus over-fulfilling our undertaking for 7th November. We are delighted that the initiative of my brigade has extended not only to the Orekhovo factories, but also to many others. There are 170 weavers following my example in our town. It is not only individual weavers or brigades, but entire shops, which have gone over to the multi-loom system: for example, shop No. 3 at No. 2 weaving mill. This movement made it possible for at least two factories of our town to start another 400 looms. As a result, the output of cotton goods in our combine has considerably increased. Last year its daily output was 80,000 metres, and now it is 110,000 metres. I am passing on my experience to my townspeople through Stakhanov schools and industrial training groups. At the invitation of textile workers of Ivanovo and Glukhov, I have given lectures there on the methods by which we work." (4th November, 1946.)

Chain Shock Brigades.

"Kalmykova and Potemkina, best automatic loom operators at the October Revolution factory (Ramensky district, Moscow region), learning of the methods of work of Maria Volkova at Orekhovo, decided to go over to 180 automatic Northrop looms

in their shift, instead of 60 which their brigade looked after hitherto. They began this on 16th August, and from the very first day the brigades began over-fulfilling the plan. On 1st September they were reorganised as chain Stakhanov brigades, covering the entire production process from the sorting of the cotton to the packing of the finished goods. Team leaders were appointed as their assistants in the preparatory departments of the spinning and weaving mills, and in the ringspinning shop. Each piece of machinery throughout the process was reserved for particular workers. As a result, there was much better checking of the quality of partly finished goods at every stage of the spinning and weaving. The breaking of yarn in the ring-spinning frames and looms, which was one of the chief causes of hold-ups, was considerably reduced. The quality of the finished material improved. . . . The organisation of chain Stakhanov multi-loom brigades made it possible to release 65 skilled workers and give them looms which hitherto had been idle. The automatic weaving shop previously turned out 12-13,000 metres a day, while now it is producing 16-17,000 metres daily. The earnings of members of the chain brigade have increased. . . . The initiative of the foremost weavers, Kalmykova and Potemkina, roused the whole factory. Their example was followed by Goryunova and Zaitseva. From 7th September they went over to 120 automatic looms, and are also successfully coping with the plan. . . . Yesterday Kalmykova's brigade, having discussed the results of a month's work in the new way, entered upon Socialist emulation in honour of the coming 29th anniversary of the November Revolution. It undertook to fulfil standards of output in September not less than 160%, in October 170% and to produce above plan 600 kilograms of yarn and 20,000 metres of cloth. The brigade has challenged Potemkina's brigade." (15th September, 1946.)

Counter-planning.

"Yaroslavl, October 24th. The Shcherbakov road machinery works has completed its year's plan of output of road motor-rollers in 9½ months. Costs of production have been lowered by 45%, instead of 18.7% provided under the year's plan. By the end of the year the works will reach the pre-war level of costs of production. The workers have calculated that the plan for 1947 could be fulfilled 125%. With the approval of a general meeting, the management has made this proposal to the Ministry of Building and Road Engineering. The resources of the works for fulfilling this higher plan next year consist of the constantly increasing mechanisation of those processes which absorb most labour. With its own forces, and on its own initiative, the plant is doing a great deal in this direction. Its output capacity is already higher than what was planned for 1947. The workers' productivity is constantly rising, and now exceeds plan by 15%." (25th October, 1946.)

"Many Hundred Percenters".

"At the locomotive repair works, Yaroslavl, there is a widespread expansion of emulation in the various trades. The number of workers performing two or three quotas per shift is constantly growing. At present the works has about 100 'three-hundred percenters' and over 500 'two-hundred percenters'. 205 workers have already produced their year's quota of output." (19th October, 1946.) "The Kharkov Regional Committee of the Ukrainian Communist Party has held a conference of leading Stakhanovites of the city's industrial plants, who have fulfilled five years' quotas ahead of time. There were people of various trades, old and young. They described how they had secured such a high productivity of labour . . ." (25th November, 1946).

Sharing of Skill.

"At a recent conference of Party and managerial personnel of the Pavlovo-Pokrovsk textile factory (Moscow region), a foreman, E. Bolshakova, suggested the organisation of Socialist emulation among foremen. This initiative has now been taken up by all foremen of the factory. The section in her charge completed its year's output by 15th November. Of the 38 weavers in her section, 30 have completed their year's quota. Their success is due to a great extent to their foreman. Being an excellent organiser, Bolshakova made a different approach to each woman weaver, getting them to raise their skill by attending Stakhanov schools and industrial training groups, and creating proper conditions for their taking on more looms. All 38 have done this, 4 of them moreover serving 18 looms, *i.e.*, three times more than the standard. Hold-ups of equipment in the section are now lower than allowed for by plan, thanks to better attention to the looms. This has raised productivity, both of equipment and of the individual weavers. In 1945 the average daily output of her section was 3655 metres, while this year it is 5356 metres. The earnings of the weavers have also increased. Kurkova, for example, was earning 696 roubles in January of this year, while in October she earned 1997 roubles: Yegorova increased her earnings over the same period from 941 to 1878 roubles; and Bolshakova's assistant foreman, Tatarnikov, increased his earnings from 1500 to 2323 roubles, etc. . . . At a conference of foremen of the textile industry of Moscow region held yesterday, Bolshakova described her work, and other foremen from various textile towns supported her valuable initiative. At the conference an order by the Ministry of the Textile Industry was read, recording its thanks to Bolshakova and rewarding her with a bonus equivalent to two months' wages. The workers and charge-

hands of her section have also been granted bonuses. The order instructs all directors of textile factories to create the necessary conditions facilitating such emulation." (1st December, 1946.)

Self-criticism.

"Kadievka (Donetz Basin), 13th November. Over a thousand people yesterday attended a meeting held here of active miners of the Voroshilovgrad Coal Combine. The meeting discussed a report by the manager, Fadeyev, on prospects of improving the work of the pits during the fourth quarter of the year. The report aroused hot debate: and there was more than enough reason for it. The combine did not fulfil its plan of coal output in the third quarter or in October, and is continuing to fall behind it in November. This year the pits of the combine have got into debt to the State to the extent of over 170,000 tons of coal. Out of eight collieries, only three have fulfilled their ten months' plan for coal output. The reasons for this unsatisfactory work are typical for the majority of the lagging pits. There is no proper control of the technical process and of organisation of labour at the face, and the machinery is poorly used. There are 428 coal-cutting machines in the pits, but only 300 are used. The average output per machine is 1560 tons per month, which is 1040 tons lower than before the war. The existing workings make it possible to produce from 2000 to 2500 tons of coal above the plan daily, but the possibilities are not taken advantage of. . . . The first to speak in the discussion was a coal-cutting machine operator, Bescherevny. His output is 8000 tons a month. He challenged all operators to raise the output of their machines to 4000 tons. . . . The possibility of sharply increasing output of the machines was also discussed by Staichuk, an operator in the Kremen-naya East pit. Ismalkov, a hewer of pit No. 3, described how, instead of a standard yardage of

40 metres, he cut 90 metres in July, 114 in August and 135 in September. . . ." (14th November, 1946.)

Office workers entering industry. *Pravda* on 9th October, 1946, reported that a young girl time-keeper, Galina Sergienko, at the Kuibyshev locomotive works at Kolomna, had decided to meet the need for labour on production and to go and work at the bench in the boiler shop. She had noticed that a number of machine-tools were idle because of the lack of workers, and went to discuss her idea of changing professions with the works committee of the Communist League of Youth. Her idea was warmly welcomed, and she entered the boiler shop on 1st October. The foreman, Levin, interrupted his holiday to help her master a drilling-machine. After three weeks she was able to work independently, and she issued an appeal to the youth of her works to follow her example. By 11th October, eighty-nine clerical workers of the works had answered the call, and the publication of the first report, two days before, had also aroused a response among clerical staff at the Stalin motor works in Moscow, the Kalinin engineering works at Podolsk, the Ukhtomsky works at Lyubetetz, and many others. By 23rd October, over 160 of the clerical staff at the Kolomna works had stated their desire to follow Galina's example, and 138 of them were already working in the shops. On 25th October, *Pravda* reported that the numbers at the Kolomna works had risen to 195, of whom 160 were already receiving their new training; while throughout the Moscow region there were 689 volunteers. Thus Vera Orekhova, a statistician at a ball-bearing works, had become the operator of a steam-hammer, and seven other clerical employees of her works had followed her example. Ten girls who had worked in the offices of the Kaganovich

metal works at Lyublino were training as moulders, steam-hammer operators, etc. At a number of textile factories girl clerks had gone over to the production shops. In pits of the Moscow coalfield forty-six former male clerks, time-keepers or waitresses were working as coal-cutter operators, hewers or drivers of electric trucks underground. At a motor works a group of technicians had decided to spend three hours daily after their working day, teaching young people the use of machine-tools.

Planning of Stakhanov methods.

"Workers of the 'Paris Commune' factory at Moscow undertook to produce 100,000 pairs of footwear over their plan in 1947. To carry out this pledge they will have considerably to raise the productivity of labour. A Stakhanovite, Vassili Matrosov, who works in the cutting shop, proposed that a plan should be worked out for introducing Stakhanov methods of work generally, in order to bring those lagging behind up to the level of the most advanced, and to help all workers to master the most productive methods of labour. Matrosov's proposal was warmly taken up in the factory, and was discussed at a conference of workers in light industry held by the Moscow Committee of the C.P.S.U. Speaking at the conference, Matrosov described the substance of his proposal. 'Our factory this year must produce 900,000 pairs of footwear more than last year. In my view, the factory man-power is able to over-fulfil this plan. What do we need for that? To raise the productivity of labour of all the workers. I myself last year produced $2\frac{1}{2}$ times my quota. A number of Stakhanovite cutters are performing double their quota. In our shop the quota is fulfilled on the average 150-155%: but this is only on an average. If you look more closely you see that, out of 125 on piece-work in our shop, 13 don't get anywhere near

their quota, and tens of workers don't reach the average standard of productivity of labour. That was why I proposed at the production conference that we should really set about passing on the best Stakhanovite methods to all the cutters. This would make it possible to bring all the workers up to the level of those more advanced. So in our shop we decided to draw up and carry out a shop plan for introducing Stakhanovite methods of labour. From words we have already gone on to deeds. The methods of work of the best cutters are now being studied in detail.'" (*Soviet Monitor*, 4th February, 1947.)

"Among large plants where the personnel are studying and planning to adopt Matrosov's methods are the 'Hammer and Sickle' textile factory, which hopes to produce three million yards of cloth above the 1947 plan, and the Orekhovo cotton factory, which hopes to exceed its annual plan by nearly two million yards of cloth. Workers from the Stalin auto works have visited Matrosov's factory to learn his new methods and study his ideas. Representatives from Ukrainian footwear factories are on their way to Moscow, following a conference of all trade unionists in the footwear industry of the Ukrainian Republic, during which Kiev footwear factories challenged the 'Paris Commune' to Socialist emulation. The trade union newspaper 'Trud' has devoted a whole page to the general shop plan worked out in Matrosov's factory. Editorially the newspaper writes: 'The proposals made by Vassili Matrosov have been warmly supported by the personnel of many factories and plants. This movement grows daily.' At the same time, *Trud* criticises directors of factories who think that plans can be worked out in two or three days for this new Stakhanovite movement. This display of 'super-operational speed' cannot lead to anything good, says the paper." (*Soviet Monitor*, 15th February, 1947.)

Apart from the pledges for increasing production, introducing economies, raising productivity, etc., which characterised the 1946 wave of Socialist emulation like its predecessors, the Matrosov movement was perhaps the most significant feature. By its endeavour to make technical excellence the property of the average man, and not of the most advanced, it was in the direct line of succession to the cost-accounting brigades of 1931, the technical, industrial and financial plans of 1933 and the Stakhanovite movement (1935) itself. Nor was this a chance event. The struggle for technical progress, the drive from below to insist on new technical methods, mark the post-war stage in Socialist emulation. The introduction of new mechanisms in the oil industry, new types of castings under high-pressure and high-frequency electrothermic finishing of parts in the motor industry, and similar perfecting of other engineering products, play a prominent part in the pledges undertaken during the Socialist emulation of 1946-47. It is significant that many Stakhanovites were among the winners of Stalin prizes in these years—the highest Soviet awards for scientific achievement.

The results of the first year's work in fulfilling the new Five Year Plan, published by the State Planning Commission in the third week of January, 1947, was a measure of the effectiveness above all of Socialist emulation.¹ In the main, post-war reconversion of existing productive machinery was completed in 1946. The gross output by Soviet industry of civil requirements rose by 20% compared with the previous year. Apart from the coal industry of the eastern regions, which completed its plan 97%, all the basic industries—metallurgy, coal, oil, electric power, chemical, heavy engineering—fulfilled

¹ *Soviet News*, 22nd January, 1947.

their plan by not less than 99%, and most of them over-fulfilled it. On the other hand, the machine-tool industry fulfilled its plan 89%, the automobile industry 92%, while lower down the scale came transport engineering (81%) and agricultural machinery (77%). The building-materials industry fulfilled its plan 105%, and the timber industry 98%. A number of the light industries and food industries over-fulfilled their year's plan. About 800 new plants were built or restored and launched in 1946. The principal defects in industry were seen to be a shortage of skilled labour, quotas of output which were too low compared with war-time achievements, and too much idle machinery.

Special attention to the technical problems of economic construction was accordingly paid by the national economic plan for 1947, published by the Council of Ministers of the U.S.S.R. on 1st March of that year. This took the form of publicly fixing, for the first time, minimum average "technical-economic standards of utilisation" for machinery in all the main industries. Among them were such standards as an output for coal-cutting machinery of 3050 tons per month in the western coalfields of the U.S.S.R. and of 4750 tons in the eastern: a speed of drilling per month in the southern and western oilfields of 600 metres per machine in commercial use, and of 280 metres per machine in prospecting—with different standards for the eastern oilfields: an output of 545 kilo-counts per 1000 spindles per hour in the cotton industry: a turn-round average period of 8.8 days for goods trucks on the railways, and so on. The standards laid down were specified as "average progressive", based on the achievements of the more advanced shops, machine-units or brigades, and not "average statistical" standards which were unduly depressed by taking into

account the most backward groups of factories or workers. Moreover, Ministries were authorised to establish more precise figures for individual undertakings. To the same general end, targets were also laid down for the progress of mechanisation in coal-mining, the timber and building industries, and loading and unloading operations on the railways, river transport and mercantile marine.

It is characteristic of the spirit in which the Soviet economy is conducted that the comment of *Izvestia* on a preliminary survey of the year's results (7th January, 1947) had already turned attention to new problems:

"In order to ensure the further economic prosperity of the country, we have not only to move forward the advanced branches of economy, but to eliminate the lagging behind of other individual branches, because this lagging behind delays the rapid restoration and development of national economy as a whole.

"At the present time the fuel industry, particularly coal-getting in the Donetz and Kuznetsk Basins and in the Urals, has not yet reached the speed of output necessary to satisfy the requirements of the whole of national economy. To bring a general advance of agriculture and a larger harvest is possible only on the basis of adequate technical equipment of agriculture. But agricultural machinery-building is not satisfying the needs of agriculture, and is thwarting the plan for deliveries of tractors and various agricultural machines and spare parts. Housebuilding and production of consumption goods are still at a low level and do not meet the needs of the people and are lagging behind the targets of the Five Year Plan. The insufficient size of output of electrical engineering factories is hindering the mechanisation of labour on a large scale and the electrification of industrial processes.

"The most important task of our industry in 1947

is at all costs to overcome the tardiness of individual branches of industry, and to bring them abreast of the most advanced."

On 20th February, 1947, a manifesto by the workers of fifteen Leningrad factories calling for a national effort to complete the year's programme of output by the thirtieth anniversary of the Revolution (7th November, 1947), began a new wave of Socialist emulation. Those aspects of production which involve greater attention to technique were prominent in the pledges given by workers' meetings in this new stage of the movement. One example can be quoted as typical. The "Krasny Bogatyr" rubber works, in response to the Leningrad initiative, undertook, not only to complete its year's output plan by 7th November and to produce 1½ million pairs of goloshes and rubber footwear above its plan in the course of 1947, but (i) to raise productivity of labour by 25%, (ii) to economise 5% of its allotted quota of rubber and 500,000 kilowatt hours of electric power, (iii) to secure economies to the sum of 1 million roubles over the plan by rationalisation and workers' suggestions, (iv) to teach 600 new girl golosh-workers their trade. For the next few weeks pledges of this kind, adopted after thorough discussion at shop or departmental meetings and factory conferences, dominated the front pages of the Soviet newspapers.

It is hardly necessary to recount the new forms of Socialist emulation which made their appearance in 1947, in response to new problems. The reader will have been prepared by the earlier stages of the movement to find that the fertile inventive genius of the Soviet workers rose to the occasion. It is a fact that, in 1947, industrial output increased by 22%, compared with 1946, and that this represented 103·5% of the overall industrial plan of

the U.S.S.R.,¹ compensating for under-fulfilment of the plan for 1946. A new campaign—"the Five Year Plan in four years"—was under way.

On 6th November, 1947, Molotov in his annual review² referred to this widespread new movement. "Individual workers undertake personally to fulfil their yearly programmes, and the Five Year programmes as a whole, ahead of time." This, he noted, was not practised before the war; and it was "developing by leaps and bounds in Moscow, in Leningrad, in the Donbas and all over the country". And this was no chance: it was "a most important factor" in raising productivity of labour.

"Socialist emulation has spread to all collective farms. All take part in Socialist emulation, workers and collective farmers, office workers, engineers and technicians, artists and scientists. Today the scope and content of emulation serve as an indication of the level achieved of the Communist attitude of the Soviet people towards work."

If we now look back on the long history of Socialist emulation during nearly thirty years, from the Subbotniks of 1919 to the friendly rivalry of millions of highly skilled workers in 1947, we may be able to make up our minds better as to who was right—Mr. Churchill, with his statement that "Communism rots the soul of a nation", or Lenin, when he said that Communism rests on "free and conscious discipline" and on "mass heroism".

We are also in a position better to judge whether Soviet planning is really the soulless and ruthless regimentation of hordes of dumb and obedient slaves, or whether it does

¹ *Soviet Monitor*, 18th January, 1948.

² V. M. Molotov, *30th Anniversary of the Great October Socialist Revolution* (Soviet News, 1947).

not, on the contrary, *presuppose* the active and critical co-operation of millions of lively individual intelligences.¹

We are able to judge better, finally, and with more concrete material at our disposal, whether the Soviet people can have either interest in, or energies to spare for, military adventures, "Red imperialism", "aggressive expansion" and the like: or whether a hard-working and self-denying people is not in fact entirely wrapped up, before all else, in cultivating its own garden.

¹ In the present chapter, and throughout this book, the important part played in the Soviet economy by the trade unions is not dealt with, save in passing. The reason for this is the writer's desire to describe the rôle of the individual worker as such, whether trade unionist or not—a rôle which has received less attention in studies of the U.S.S.R. than that of the trade unions. But it must be obvious that, as the broadest organisations of the working class, and based upon democratic elections from the workshop upwards, the Soviet trade unions cannot but exercise an immense influence in deciding the success or otherwise of industrial planning. The first post-war campaign for conclusion of collective agreements (in 1947), for example, was a combined effort to check up the fulfilment of both economic planning and pledges of Socialist emulation (see the article on the subject by V. V. Kuznetsov, chairman of the Central Council of Trade Unions of the U.S.S.R., in *Profsoyuzy SSSR*, No. 2, 1947). More than 25,000 collective agreements were concluded in Soviet industrial and transport undertakings in 1947, covering no less than 14 million workmen and technicians. The agreements covered questions of piece-rates and production quotas, vocational training, housing, medical and rest facilities, food supplies and canteens. But discussion of the draft agreements became fully-fledged production meetings as well, attended (on an average) by about 90% of the workers. Over 880,000 speakers from the floor took part in the discussions, in the course of which 700,000 suggestions were made—half of them dealing with methods of mechanising arduous processes, improving safety devices, eliminating shortcomings in machinery and organisation. 200,000 of these suggestions were included in the agreements. (*Soviet News*, 22nd April, 1948.)

CHAPTER IV

COLLECTIVE FARMS AND THE INDIVIDUAL

1. COLLECTIVE FARMING IN SOVIET ECONOMY

THE fourth Five Year Plan, in the statement of its principal aims, associated agriculture with the industries producing consumer goods as requiring further development "in order to raise the material well-being of the people of the Soviet Union, and to secure an abundance of the principal items of consumer goods in the country". Thus agriculture, like industry, had as its target the provision of butter rather than guns.

The section of the Plan dealing with agriculture laid down a programme of detailed figures and aims, starting from the principle that "measures shall be taken to strengthen the common husbandry of the collective farms". Enormous sums (19.9 milliard roubles) were to be provided by the State for capital development in agriculture and twice as much was to come from capital investments by the collective farms themselves. Under the former heading were included large irrigation and drainage works, the provision of 325,000 tractors and agricultural machines, the establishment of many hundreds of State machine and tractor stations for servicing the collective farms, the building of numbers of small power-stations, large expenditure on developing the stock-breeding of collective farms, and every kind of investment on better agricultural technique.¹

¹ *Law on the Five Year Plan, passim.*

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"The most important task of agriculture in 1946-50", it was stated in the Plan, "is the general improvement of crop yields and an increase in the gross harvest of agricultural produce, to be effected by considerably improving farm methods and applying the latest achievements in agricultural science." It will be useful, perhaps, to show at this point how the main targets of the fourth Five Year Plan in agriculture compare with the highest points reached by Tsarist Russia and the U.S.S.R. respectively on the eve of the two world wars: ¹

	1913.	1940.	1950.
Area under grain (million hectares)	94.4	110.4	105.7
Output of grain (million tons)	80.1	118.8	127.1
Output of cotton (million tons)	0.7	2.5	3.1
Yield of cotton (centners per hectare)	10.8	12.0	18.4
Output of sugar-beet (million tons)	10.9	21.0	26.0
Yield of sugar-beet (centners per hectare)	168	171	190
Sunflower seed output (million tons)	0.7	3.3	3.7
Output of potatoes (million tons)	23.3	84.2	115.3
Mineral fertiliser supplied (million tons)	0.188	3.1	5.5

Special mention was made of the particular problems of collective farms:

"In order to strengthen and develop the common husbandry of the collective farms, measures shall be taken to increase their wealth, *i.e.*, their incomes, indivisible funds, buildings, cattle, equipment and livestock, and also their reserve stocks and seed and forage reserves.

"Proper protection must be arranged for the common lands and property of the collective farms, and no breach tolerated of the collective farm statutes or of collective farm democracy, *e.g.*, the election of the management boards of the collective farms and their accountability to the general meeting of farm members.

¹ Quoted from V. Dmitriev, *Razvitie Selskogo Khoziaistva v Novoi Pyatiletke*, in *Propagandist* (1946), No. 11-12.

"Labour productivity on the collective farms shall be increased by correctly organising labour and strengthening and increasing the rôle of the work-day unit in distributing the collective farm income; the system of working brigades and teams on the collective farms shall be improved by the practice of individual and group piece-rates; the making of additional payments to collective farmers for obtaining higher harvest yields, rearing young cattle and increasing their productivity, shall be widely practised.

"Greater discipline shall be exercised by the collective farms in discharging their obligations to the State in respect of deliveries of farm produce."

Quite a number of terms used in this passage are such as have never occurred in any previous system of agriculture known in world history; nor is this surprising, seeing that collective farming is an entirely new form of agriculture. In understanding the meaning of these new terms, one goes a fair way towards understanding the spirit in which the individual Soviet citizen engages in agriculture, and his part as a conscious agent in making that agriculture thrive or decay.

It is essential at the outset, however, to have fully in mind just how important collective farming is in the output of Soviet agriculture.¹ On the eve of the war, the 236,000 collective farms, comprising 19.2 million peasant families (97% of the total engaged in agriculture), were responsible for 290 million acres of cultivated soil. The 4000 State farms sowed about 24 million acres² (out of a total area of 168 million acres under their control). Some half-million small individual peasant farms covered 1½ million acres. In the gross output of agricultural

¹ The English reader will find these figures and many other valuable data in Karpinski, *What are Collective Farms?* (1944), pp. 22-3, and Baykov, *op. cit.*, pp. 327, 333.

² Article by I. Kantyshev, in *Bolshevik*, No. 5 (1947).

produce, including cattle, the share of the collective farms was equally decisive—62.9% by the collective farms as units, and 21.5% by their individual members on their personal homesteads (amounting in the aggregate to 13 million acres). The share of the collective farms in the output of grain, however, was still higher, since the State farms concentrate particularly on industrial crops and livestock.

What, then, is a collective farm? In the first place, it is organised on land which belongs to the State—for all land in the U.S.S.R. is national property, and cannot be bought or sold—but it pays no rent for the land, the use of which is vested in the collective farm in perpetuity by a special deed from the State. Secondly, the productive equipment, buildings, stocks and stores on a collective farm are partly the property of the collective farm as a whole, and partly the individual property of the members—such as their private houses, the farm animals and poultry maintained on the small homestead attached to their house, and small agricultural implements which they possess for their own personal use. We have already seen what a small proportion of the total collective farm area falls on these homesteads, even added together over the whole country.¹ Thirdly, on this economic basis, the members constitute a co-operative producing organisation, and manage their affairs in the same way as other co-operatives the world over—namely, by electing a chairman and a management committee, or board, at their annual general meeting. The general meeting is the supreme authority of the collective farm, and no important decision can be taken by the manage-

¹ But the aggregate number of farm animals, other than horses, individually owned by the collective farmers in 1938 was greater (from 30% to 100%) than the aggregate owned collectively: see Baykov, *op. cit.*, p. 327, for the exact figures.

ment committee without its assent. The management committee of the collective farm controls the allocation of jobs to different members, and their grouping in teams on this basis, through the chairman, team-leaders or charge-hands, etc. Fourthly, the members of the collective farms are not anyone's employees, since they are working in an enterprise which they collectively own: in particular, they are *not* employees of the State, since the State is only the proprietor of the land on which they work. Nor are they paid wages, since they are not selling their labour-power to anyone. They are working together for themselves: and their work is measured accordingly, not in monetary form, but according to the number of work-days each contributes.

For this purpose all the works to be performed on a collective farm have been divided since 1933 into seven groups. The lowest group comprises the simplest unskilled jobs—and one day's work under this heading counts as half a work-day. The highest group covers the most complex and skilled jobs—and here one day's work counts as two work-days. There is a quota of output for each job, fixed by the general meeting in accordance with the nature of the ground to be covered, crops dealt with, state of machinery available, the particular animals dealt with, and so forth. To receive the full value of the work-day or portion of it allotted for the job, this quota must be completed. If less is done, there is a proportionate reduction in the amount of work-day credited to the individual: if more than the quota is done, there should be a bonus for exceeding it. There are also bonuses in the shape of additional work-days for particular distinction in yields of produce, milk, etc., or in other jobs. In 1945, over 30% of the collective farms were operating bonus systems of payment.

At the end of each day if possible—but not less frequently than once a week—the team-leader enters the “credit” of each collective farmer under his charge, measured in work-days, in his work-book, and corresponding entries are made in the books of the collective farm. Finally, the distribution of the produce, and of the cash income of the collective farm—secured by realising part of the produce and by deliveries at fixed prices to the State—takes place on the basis of the number of work-days credited to the various members. Thus, just as in the State factories and State-owned farms, the collective farmer gives according to his ability, and receives according to the quantity and quality of work he has performed: but he does so, not on the basis of a wages system, but by distribution of the net produce of the collective farm among its members proportionate to the work they have contributed.

It should be noticed that, in this ingenious system,¹ it is not the entire produce that can be distributed in this way. The collective farm has to bear its share of the costs of the State, and as an enterprise it must meet its own running costs. Therefore the collective farm supplies from its total produce a proportion, determined by law, compulsorily sold to the State at a fixed price: with usually an additional quantity, at the discretion of the collective farm itself, sold by contract to the State at a higher price. The collective farm repays to the State any advances made in the shape of seeds. By selling part of its produce during

¹ The broad principles here described are worked out in detail in the *Primerny Ustav* (Model Statutes) of a collective farm, adopted by the 2nd Congress of Collective Farm Shock Workers (*Pravda*, 18th February, 1935). A good general description of the organisation of the collective farms as it stood after the war is to be found in an article by A. Teryaeva, *Organizatsia i Oplata Truda v Kolkhozah*, in *Bolshevik* for May (No. 9), 1947.

the year, the collective farm is enabled to pay income tax (at 4% on its collectively-used *produce* and on the *cash* coming in from its sales by contract to the State; at 8% on the *produce* distributed among members, and on *cash* revenues from sales in collective farm markets, disposal of products from subsidiary enterprise, etc.), as well as insurance premiums. It also repays any cash advances which may have been made by the State for construction purposes.

The running costs of the collective farm itself include payment for work done by the local machine and tractor station (this is paid in kind), additions to the "indivisible fund" (for building or maintenance of works of common interest, like communal nurseries, cattle-sheds, baths, power-stations, etc.), cultural and administrative expenses (the last two heads in cash) and the building-up of reserve funds of produce of all kinds, both as insurance for hard times and for the maintenance of the sick, aged, invalids and children's welfare institutions.

For the distribution of the net income, the following method is then adopted. The totals of work-days earned by all the members of the collective farm are added together, and the resulting aggregate figure is divided into the total amount of the net produce, in kind and in cash. In this way a quotient is arrived at, representing the value of one work-day, in terms of both produce and cash.¹

Thus a work-day may be found to be worth, say, 10 lbs. of grain, 20 lbs. of potatoes, 4½ lbs. of meat, so much of sugar, or cotton, or tobacco—according to the nature of the produce of the particular collective farm—

¹ For further details, Batov, *Co-operatives in the Soviet Union* (Soviet News, 1945), pp. 42-4, will also be found useful by the reader unfamiliar with Russian.

and, say, 2.3 roubles in cash. These amounts are then multiplied, in the case of each member of the collective farm, by the number of work-days he has to his credit, and the result is his share of the total *net* produce of the year's working of the collective farm—distributed, as is obvious, strictly in accordance with the amount of work he had put in.

The distribution of the proceeds of Soviet collective farms in 1940, according to a recent writer,¹ was as follows (in percentages of the total):

	In kind.	In cash.
Payments to State	13.7	9.4
Costs of production	50.4	27.7
Net income paid out ² to members .	35.9	62.9

It should be noted that, by law, all members of collective farms must put in a minimum number of actual days of work on their farm in the course of a year. Before the war, the numbers varied from sixty days in the less fertile central regions, the North and the Far East, to 100 days in the cotton-growing regions of Asia and the Caucasus. In April, 1942, the minima were raised by roughly 50%, and they have not been lowered since, owing to the needs of reconstruction. Average work-days earned per able-bodied collective farmer rose from 254 in 1940 to 352 in 1942.³

A letter published in *Pravda* (28th October, 1946) from the chairman of a small collective farm in the Kuibyshev region, numbering 50 households, may be taken as a fair example.

¹ Karpinsky, *op. cit.*, p. 34.

² It will be noticed that the proportion of the gross fruits of their labour individually consumed by the collective farmers is (contrary to what is asserted by anti-Soviet economists) *higher* than the proportion for the nation as a whole (see chapter 2).

³ Voznesensky, *Voyennaya Ekonomika SSSR*, p. 93.

When it was formed, in 1929, it received nearly 1000 hectares (nearly 2500 acres) of land for its use. During the war, although its main labour force consisted of women, lads and old men, it extended its tilled area by well over 300 acres, using what previously had been regarded as waste land. In spite of the drought in 1946, careful management enabled it to increase the yields of its grain by 50% compared with 1944, and to raise about 30 cwt. of rye and 28 cwt. of oats per hectare. Between 1940 and 1946 it increased the number of its large cattle from 69 to 126, and of its sheep from 252 to 462; and in addition it set up a poultry farm and 72 beehives during the war. Not only did it complete its full planned deliveries of grain, milk, eggs, wool and meat to the State, but it considerably exceeded the plan in all these respects, and was also able to put up a number of new farm buildings, such as a piggery, a blacksmith's shop, a collective farm office, etc.

In 1945 every one of its able-bodied members had on an average 320 work-days to his or her credit, and earned not less than 7 lbs. of grain per work-day. In 1946, after nine months, the average credit was already 250 work-days, and the collective farm had felt justified in advancing about 5 lbs. of grain and $\frac{1}{4}$ lb. of wool per work-day on account: this meant, of course, that the collective farmers could dispose of this produce on the market for their own needs.

These results had been achieved not only by the efforts of a number of outstanding individuals, mentioned in the report, but by well-organised team work. The spring sowing in 1946 had been completed in seven days, ploughing of fallow had been carried out early, autumn sowings had been completed by 12th August, and by the middle of September the harvest of grain and other crops had been

gathered in. By the third week in October, although all field work had been completed, the various teams were hard at work preparing for the new harvest of 1947—completing the ploughing of stubble in anticipation of the snows, gathering fertiliser and manure, completing repairs and white-washing of the cattle-sheds, devoting more time to agricultural training in study-circles, etc.

In October the collective farm was discussing its own Five Year Plan of development, involving much improvement of field work, animal husbandry, housing and general welfare. The plan provided for more bee-keeping, an orchard of 12 acres and the beginning of electrification in 1947.

This account of an average collective farm leaves out, of course, the hard struggles by which its early years were characterised. Although collective farms began to come into existence soon after 1917, they are in their great mass, and for essential reasons, a product of the Five Year Plans. In general, the appearance of collective enterprise in agriculture had been foreseen by leading Socialist theoreticians long before the Revolution. Thus in 1902 Karl Kautsky, then the chief international exponent of Marxist theory, had written: ¹

“The peasant has nothing to fear from a Socialist régime. . . . Its own interests demand that the agricultural industry should be brought to a higher stage, by the care of animals, by machines and fertilisers, by improvement of the soil. . . . The State would much prefer, instead of selling breeding animals, machines and fertilisers to the individual peasants, to deal with the peasants' societies and co-operatives. These societies and co-operatives would find, as the purchasers of their products, no

¹ Kautsky, *The Social Revolution* (C.H. Kerr, 1902), pp. 159-62.

longer private middlemen but either co-operatives, consumers' unions, municipalities or national industries (mills, sugar-factories, breweries and the like).

"So here, also, private industry would continually recede before social, and the latter would finally transform the agricultural industry itself. . . .

"The peasants will combine their possessions and operate them in common, especially when they see how the social operation of expropriated big industry proves that with the same expenditure of labour perceptibly more can be produced. . . . When once the peasant sees that he can remain in agriculture without being compelled to renounce leisure and culture, he will no longer flee from agriculture but will simply move from petty production to big production; and therewith the last fortress of private property will disappear."

Nevertheless, such theory itself recognised that large-scale socially owned industry must first provide a convincing example of success, and, secondly, that it must be in a position to provide the peasant with the machinery, fertilisers and other resources of agricultural science which would make the change demonstrably worth while. This was not possible (even on a minimum scale) in Russia before the Five Year Plans. During the four years preceding the first Five Year Plan the number of collective farms increased from just over 15,000 to 20,400, their membership (all told) from under 800,000 persons to over 1,200,000, and their cultivated area was only about 1% of the total under cultivation in the U.S.S.R. It was only the rapid industrialisation of the country that made it possible to convince the peasant that collective farming was worth taking up—this in spite of the fact that from the beginning it had been clear that, where collective farms did exist, they had a better yield and could produce

more surplus for the market than individual farming. In 1927-28 it was estimated that this surplus in the individual peasant farms did not exceed 19% of the total output, while in those collective farms which existed it was over 50%.¹ But this was not large-scale proof, such as came when the State proved able to supply the peasants with great numbers of tractors, substantial credits and other assistance.

It should be noted that assistance in tractors did not merely take the form of distributing them by ones and twos to the individual groups of peasants who were enlightened enough to set up a collective farm: this was a wasteful method of procedure. On the initiative of one of the Ukrainian State farms in the Odessa area, a "tractor column" was set up in 1927 to serve the collective farms of its neighbourhood. Its success was so outstanding that it was reorganised as a "machine and tractor station", serving twenty-six villages with a total area of nearly 60,000 acres of land at their disposal. In the autumn of 1928 the Central Grain Co-operative Society, at a cost of 1½ million roubles (half from the State and half from its own resources), set up thirteen tractor columns, composed of 378 tractors previously scattered through small collective farms, and another twenty received new from the factories. With this mechanical force, got together in the chief grain-producing areas of European Russia—the Middle and Lower Volga, the Crimea and North Caucasus, and the Central Black Earth Region—very substantial results were achieved, in economy of labour, in encouragement of better agricultural methods, in use of hitherto waste land, in providing fodder for dairy and meat farms, and so on. The results were made widely known, and the following year

¹ *Kontrolnye Tzifry na 1927-8*, pp. 370-1, 373.

machine and tractor stations began to be set up all over the U.S.S.R.¹

Secondly, the State prepared the way by encouraging by all possible means the formation of some 80,000 rural co-operative societies for buying equipment and marketing produce, "which produced a change in the mentality of the peasantry in favour of collective farms".²

Another important way in which the State came to the help of the intending collective farms in the first months of 1930 was by making it possible for some 25,000 industrial workers with practical experience of organisation to go into the countryside in "brigades", to advocate the formation of collective farms and help to organise them.³

Finally, the large State farms became object-lessons to the peasantry, for many miles around them, of the advantages of large-scale farming, as well as centres of assistance in agricultural advance to collective farms as they were formed.⁴

In 1929 the percentage of peasant homesteads in the collective farms trebled: in 1930, after a preliminary period of "dizziness from success", in which zeal of local organisers outran their discretion and many thousands of

¹ An account of this early stage, with much additional detail, will be found in an article by M. Latzis in a publication of the Central Committee of the C.P.S.U., *Puti Podyoma i Sotsialisticheskoi Rekonstrukcii Selskogo Khoziaistva* (1929), pp. 280-303.

² Stalin, *Leninism* (1944), p. 274.

³ Later research has established that the decision of the Central Committee of the C.P.S.U. in November, 1929, which gave national importance to this movement, was itself based on initiative from below: in particular, on a letter in the Rostov *Molot* (5th October, 1929) from a workman advocating emulation between factories in helping collectivisation of the countryside, which was followed by a resolution of the workmen of a Rostov electrical engineering factory to vote up to 1% of their wages for the maintenance of workers sent to the country for this purpose (*Voprosy Istorii*, No. 5, 1947).

⁴ Karpinski, *What are Collective Farms?* (1944), p. 17.

artificially-created collective farms had to be dissolved, the number nevertheless increased sixfold: and by the end of 1931 over half the peasant population of the country were in collective farms. By 1936 90% of the peasants were collective farmers, and by 1940 just under 97%. On the average, there were about eighty peasant families in each collective farm.

2. THE TRANSFORMATION OF AGRICULTURE

In the course of this second agricultural revolution, as has been noted earlier, the last remaining "fortress of private property" did in fact disappear, by the taking away of the agricultural property of the village small capitalists—the kulaks—and not dividing it among the peasantry as that of the large capitalist landowners had been divided in 1917-18, but merging it in the new, jointly-owned property of the collective farms. A further result was that the peasant began to see the advantage of large-scale production even when, as was often the case in the early years (1929-32), he could not be adequately supplied with machinery. Stalin remarked on this subject in December, 1929:¹

"Take, for instance, the collective farms of the Khoper district in the former Don region. Outwardly the technique of these collective farms scarcely differs from that of the small peasant farm (few machines, few tractors). And yet the simple pooling of the peasant implements of production within the collective farms has produced results of which our practical workers have never dreamt. What are these results? The fact that the transition to collective farming has brought about an increase of the crop area by 30, 40 and 50%. How are these

¹ *Leninism* (1944), pp. 314-16.

'dizzying' results to be explained? By the fact that the peasants, who were powerless under the conditions of individual labour, have been transformed into a mighty force once they pooled their implements and became united in collective farms. By the fact that it became possible for the peasants to till waste and virgin soil, which is difficult to till by individual labour. . . . It goes without saying that the superiority of the collective farms over the individual farms will become even more incontestable when our machine and tractor stations and tractor columns come to the aid of the embryonic collective farms. . . ."

This persuasion of the peasantry of the advantage of large-scale farming immediately brought forward problems which had never before been tackled—those arising out of a more efficient division of labour and specialisation according to individual aptitudes, such as had been impossible in small peasant plots. Moreover, where better methods of agriculture had been used in Russia in the past, they were carried out in capitalist conditions, on a certain number of private estates conducted on more or less modern lines. Now all at once there were tens of thousands of large-scale agricultural enterprises coming into being, in an unprecedentedly short space of time, where the same problems had to be solved on the basis of co-operative ownership, *i.e.*, not under the whip of a threat of dismissal, but basically by methods of persuasion, with only that ultimate reserve weapon of expulsion which any co-operative society retains. Whereas a few enlightened landlords in the past could be amply served by trained supervisory personnel drawn from Russian or foreign agricultural colleges, the vast scale on which the collective farm movement was developing meant that such sources would be quite inadequate, and the personnel must be drawn in the main from the peasants themselves,

i.e., from men and women who had never had experience of the organisation of co-operative farming, any more than anyone else.

The problems of individual responsibility, individual effort, individual initiative, which the collective farm system immediately called into existence, are thereby brought into high relief. It is a paradox that those hostile critics of collective farms who imagine them to be "a revived form of serfdom", "machinery for regimenting the peasantry", and so forth, are quite unaware that, on the contrary, the collective farm for the first time made it possible and necessary to unleash the individual initiative of the Russian peasant in the field of planning.

Stalin said on this subject, in his speech of January, 1933, on the state of work in the rural districts, that "a collective farm is a large enterprise; and a large enterprise cannot be managed without a plan. A large agricultural enterprise embracing hundreds and sometimes thousands of households can be run only on the basis of planned management. Without that it will inevitably fall into ruin and decay." Thus, he said, the responsibilities of the Party and the Government were not diminished but increased as a result of the collective farm system.¹ But this was not only the responsibility of the Communists. The following month, at the first Congress of Collective Farm Shock Workers, Stalin laid particular stress on this. Conscientious work was all that was needed to extend the substantial results already achieved by collective farming. This he defined more precisely—"to distribute collective farm incomes according to the amount of work done; to take good care of collective farm property; to take care of the tractors and the machines; to organise proper care of the horses; to fulfil

¹ *Leninism* (1944), pp. 446-7.

assignments of your workers' and peasants' State; to consolidate the collective farms, and to eject from the collective farms the kulaks and their toadies who have wormed their way into them". Greater efficiency in these respects would make it possible for all collective farmers to rise to the level of prosperous peasants. And this, he declared, was not the monopoly of the Communists: they had "not only to teach the non-Party people, but also to learn from them".¹

In fact the Five Year Plans—Stalin was speaking when the second Plan was beginning—had brought the peasants of the U.S.S.R., by a different route, to the very type of problem which the factory workers (and all other wage-workers) were solving in increasing measure, as we have seen, from 1928–29 onwards—the problem of combining collective interest and purpose with individual initiative and advantage.

The shock workers of the collective farms met in congress for the first time more than three years after the first congress of shock brigaders from the factories—but the very fact that such a meeting was held indicated that a new stage in the history of the peasantry had begun. In this stage it was not only a question of their changed psychology as a class, but of their changed outlook as individuals. Three more years of experience enabled Stalin to say, at the VIII All-Union Soviet Congress in November, 1936 (held to adopt a new Constitution for the country): "Our Soviet peasantry is an entirely new peasantry. . . . It bases its work and wealth, not on individual labour and on backward technical equipment, but on collective labour and up-to-date technical equipment." It was a peasantry "the like of which the history of mankind has never known before".²

¹ *Leninism* (1944), pp. 461, 465.

² *Ibid.*, p. 566.

At the XVIII Congress of the C.P.S.U., in March, 1939, Molotov was able to point to the development of the Stakhanov movement in the collective farms as well as in industry: very often, he said, the collective farm members in this respect "do not yield to the workers in their successful raising of the productivity of labour".¹

Before examining this claim more closely it is desirable to survey the changes brought about in Soviet agriculture by the adoption of collective farming. The Stakhanov movement in collective farming, no less than in industry, has its own material foundations. Homesteads without cultivated area, horses, cattle or equipment had been eliminated from the Soviet countryside: all peasant farms had been brought into production: and a basis for a rational system of agriculture had been created. The "poor peasant", who had to hire himself out for all or part of the year to maintain his family, by working on the land of someone richer than himself, has disappeared. In 1916 the proportion of traction on the land which was mechanical in character represented only 0.8%, while in 1938 it was just under 70%.² If we take the period of the Five Year Plans, we find that spring ploughing was 19% mechanised in 1932, and nearly 67% mechanised in 1940: spring sowing was 20% mechanised in 1932, and over 52% in 1940: harvesting by combines was carried out only to the extent of 4% in 1932, and nearly 43% in 1940. These three respective figures, under the fourth Five Year Plan, were to rise in 1950 to 90%, 70% and 55% respectively.³ The consequence of this mechanisation was a big increase in the productivity of labour, the

¹ *Treti Pyatiletni Plan* (1939), p. 38.

² Article by Bolgov in *Bolshevik* (1946), Nos. 7–8.

³ *Itogi Vypolnenia Vtorogo Pyatiletnego Plana* (1939), pp. 96–7, and article by Slepov in *Bolshevik* (1946), No. 10.

releasing of millions of new workers for industry and transport, the mass introduction of peasant women into more productive forms of work on the farm (since the work-day principle involved the establishment of "the rate for the job"), the appearance of many new branches of agriculture, the extension of the sowing area, and the development of labour enthusiasm and Socialist emulation in the countryside, making agricultural planning a real possibility for the first time.

Thus, from 1913 to 1928 the cultivated area increased in Russia by about 20 million acres, but the area under grain decreased. From 1928 to 1938 the total cultivated area increased by over 59 million acres, and the area under grain increased by over 24 million acres.¹ This not only solved the problem of securing sufficient grain to satisfy expanding needs, but involved a rapid increase in the area under industrial crops, and for the first time in Russian agricultural history made it possible to introduce perennial grasses on a large scale.

In the course of this process the old division of the country into "consuming" and "producing" areas was almost eliminated. Classical "consuming" provinces, such as Moscow, St. Petersburg, Nizhni and Ekaterinburg, which in 1913 had about $4\frac{1}{2}$ million hectares under crops, sowed—as Moscow, Leningrad, Gorki and Sverdlovsk regions—just under 6 million hectares in 1938, practically all in collective farms. But the transformation was made possible primarily by a marked increase in yields. The average grain output per hectare was 7.3 centners in 1910-14, 9.1 centners in 1933-37, 9.3 centners in 1938 and 1939, and 10.7 centners in 1940.² We have seen at the beginning of the chapter the large increase in yields

¹ Bolgov, *op. cit.*

² *Ibid.* A centner is 100 kilograms, i.e., 220 lbs.

by 1950 (to 12 centners) for which it has become a practical possibility to plan.

The rise of gross output of grain and industrial crops between 1927 and 1937 outstripped the growth of population, making it possible to effect a very large increase in the marketed surplus. In the case of grain the percentage of gross output thus available rose from 12 to 40; in the case of meat it rose from 35 to 59; of milk from 15 to 31 and of wool from 27 to 75.¹

What this meant for the collective farms can be seen by the growth of the average amount of grain earned in them per work-day from 1932-33, when it amounted to 11.76 cwt., to 1937-38, when it had almost trebled, reaching 34.13 cwt. The cash payment per work-day in the second year was three and a half times what it was in 1932. In 1913 more than half the peasantry had not enough grain to last them through the year. In 1938 the average family on the collective farm had, on the eve of the new harvest, two-thirds of a ton of flour in store.

In the Ukraine collective farmers who earned 2 kgs. of grain or less per work-day represented 80% of the total in 1934, and only 16% in 1937: those who earned between 2 and 3 kgs. per work-day were 14% of the total in the first year, and 27.4% in the second: those who earned between 3 and 5 kgs. were only just over 5% in 1934, but represented over 42% in 1937. Those who earned 5 kgs. and over represented less than 1% in 1934, and 14% in 1937.² It is difficult to exaggerate the moral and political consequences of this change in proportions.

Particularly striking were the results achieved by Soviet agriculture in war-time. In the first world war the area

¹ Bolgov, *op. cit.*

² These figures were given by N. S. Khrushchov in his speech at the XVIII Party Congress on 13th March, 1939 (printed in *Land of Socialism Today and Tomorrow*, pp. 387-8).

under cereals dropped by 11% and the harvest by 22% in the course of two years. In fact, there were nearly 25 million acres less sown in 1916 than in 1918.¹ In 1941 the area under winter crops was extended by nearly 4 million acres in the unoccupied areas, and in 1942 by another 6 million acres. By 1943, in spite of the big German advances in south-eastern Russia the previous year, the total area under crops was still 26% larger than in 1913, in unoccupied territories; and in 1944 another 17 million acres were sown. As a result, the gross output per working collective farmer in the unoccupied areas was actually higher in 1941-43 than in 1938-40. In the Central "non-black earth" regions (*i.e.*, the former consuming provinces) the output was up over 53% per head: in the Urals 43%: in the Volga regions 13%: and in Western Siberia 10%.²

It is hardly to be doubted that this remarkable contrast between experiences in the first and second world wars is due chiefly to the superiority of the collective farm as a form of economic organisation, with the high degree of mechanisation already noticed. Only this could explain why it was possible for less experienced women to take the place of men in key positions so completely, and at such short notice, and yet produce such results. Work-days credited to women collective farmers amounted to 38% of the total before the war, and over 80% in 1944: 4% of tractor drivers and 6% of combine operators were women in 1940, while in 1944 the proportions were 81% and 62% respectively.³ In the *eastern regions*, upon which

¹ *U.S.S.R. Speaks for Itself* (1943), p. 12, and *Soviet Monitor*, 1st November, 1944.

² Bolgov, *Sila i Zhiznennost Kolhoznogo Stroia* (1945), pp. 11, 13-14; also his article *ut supra*.

³ Gatovsky, *Ekonomicheskaya Pobeda Sovetskogo Soyuzu* (1946), p. 82: and Voznesensky, *Voyennaya Ekonomika SSSR*, pp. 92-3.

the U.S.S.R. had chiefly to rely for its agricultural produce during the war—the Volga, the Urals and Siberia—only one-eighth of the managers of livestock farms in 1940 were women, but nearly three-fifths in 1943: leaders of the all-important working unit of the collective farm—the "brigade" or team—numbered only 3.5% women in 1940, but 38.5% in 1943. In the "*non-black earth*" (central) regions, women chairmen of collective farms numbered 3.5% in 1940 and 17.5% in 1943: among the team-leaders they rose from 5% to 64%: among managers of livestock farms from 30% to 72%.¹

With the changes in material prosperity of the peasants came appropriate changes in their standards of living, of comfort and of culture. "Now it is no longer a question of finding room in industry for unemployed and homeless peasants who have been set adrift from their villages and live in fear of starvation—of giving them jobs out of charity. The time has long gone by when there were such peasants in our country," Stalin remarked at the last pre-war Congress of the Communist Party.² The life of the collective farmers on the eve of Hitler's attack was becoming fuller, more many-sided, with wider horizons of culture as well as material comfort. Before collective farming appeared, four-fifths of the rural population were illiterate, while by the beginning of 1939 this proportion had fallen to under a quarter, and those among the older people. Clubs, libraries and reading-rooms, secondary schools and amateur theatres, and many other of the physical requirements for cultural progress now exist in very large numbers. The appearance of a considerable body of intellectuals from amidst the collective farmers, running into many hundreds of thousands—

¹ Batov, *Co-operatives in the Soviet Union* (Soviet News, 1945), pp. 63-4.

² *Leninism* (1944), p. 641.

agricultural technicians, teachers, doctors and other health workers, journalists and writers trained in the thousands of country newspapers produced by the machine and tractor stations—was noted at the same Party Congress by Molotov. For several years past the Soviet Press has abounded in items of news like the following, taken at random over a period of a few months:

"In 1914 only 3100 doctors served 80 million village people. . . . In the villages of the Russian Federation alone there are now working about 11,000 doctors, over 40,000 medical assistants and midwives and over 29,000 nurses. . . . New types of preventive and healing institutions have appeared in the collective farm village—the maternity home, the children's crèche, the polyclinic, the collective farm sanatorium, etc. . . . The health service in the villages during the war years continued to develop and improve. During the four years of war the number of beds in village hospitals increased by 45,000, and 1770 doctors were added to the village health service. . . . In the Vologda region the collective farms in some districts, with their own resources, and helped by the regional and district organisations, have set up inter-collective-farm children's sanatoria. The collective farms put the best buildings at their disposal and are supplying them with fuel and foodstuffs. Doctors, medical workers and teachers look after the children in these health institutions. Over 8000 children have passed through them in a short time." ¹

"Novgorod, 18th September. Many collective farms of this region are building clubs, reading-rooms and libraries. A big club is being built by collective farmers of the Golinsky rural district, Shimsk district. The club will have a hall seating 200, a reading-room

¹ Article by A. F. Tretyakov, People's Commissar for Health of the Russian Federation. (*Pravda*, 1st February, 1946.)

and a rest-room. . . . The Kalinin and Khalturin collective farms, Staraya Russa district, are building a reading-cottage, with a small auditorium, library and study-room." ¹

"Sleptsovskaya, Grozny region, 27th November. The building of an irrigation canal from the river Asta to the Sunzha, 12 miles long, has begun in the Sunzha district of this region. This is an ancient dream of the peasantry here. It will make possible the irrigation of over 12,000 acres of land, and the water-power will be used for two power-stations of 1300 Kw. capacity, which are to be built. It has been decided to build the canal in 36 days, and the collective farms have appointed permanent teams for this work, which will involve removing 160,000 cubic metres of earth. 1500 collective farmers of the district are joining in this people's building job." ²

"Sverdlovsk, 29th November. The 'Dawn' collective farm of the Achitsk district has been gathering an abundant harvest every year, and extending all branches of its socially-owned economy. By 7th November it completed the building of a hydro-electric station. The collective farmers have begun the application of a general plan for the reconstruction of their village, commencing with houses in which 110 families will receive well-built apartments. Each will have electricity, radio and piped water supply. Each house is to have an orchard. Members of this collective farm completed all their State deliveries of produce ahead of time, and sold to the State about 320 tons of grain above their plan." ³

Sotsialisticheskoe Zemledelie, the daily newspaper published by the Agricultural Ministry of the U.S.S.R., reported on 1st January, 1947, that at the collective farm of Dryablovo, Streletz district, Kursk region, the members had built a

¹ *Pravda*, 19th September, 1946.

² *Ibid.*, 28th November, 1946.

³ *Ibid.*, 29th November, 1946.

power-station on the river in 1945, barely eighteen months after their liberation from the Germans. At this time, and for months to come, they had only women, old men and young people working in their fields. Puchkov, chairman of the collective farm, said in an interview: "Last summer (1946) was parched. Almost everything in the fields dried up. In former times such a drought would have been a disaster. How many beggars and ruined people there would have been in every village! After such a drought many peasants would not have got on to their feet again to their dying day. But this didn't happen in our collective farm. Stalin and the Soviet State helped us with grain, seeds and machines; and next summer we shall gather in a big harvest. The winter grain has been sown in good time, and we have ensured that the fallow has been well prepared for the spring." At present, he said, they were using their electric power to thresh and cut straw; in the spring it would be used to pump water to the household allotments. They were setting up a saw-mill and buying two transformers, in order to transmit power to the remoter fields for electrically driven threshers. Their plan for 1947 included the buying of a cinema projector and a car, and the building of a club.

It was of activities like these, developed still further in perspective, that Stalin was speaking when he said, in his report to the XVII Congress of the C.P.S.U. in January, 1934, that the agricultural unit of the future Communist society—the commune, "a higher form of the collective farm movement"—would arise out of developed and prosperous collective farms:¹

"The future agricultural commune will arise when the fields and farms of the artel" (the traditional

¹ *Leninism* (1944), pp. 519-20.

Russian name for a producers' co-operative unit) "are replete with grain, cattle, poultry, vegetables and all other produce; when the artels have mechanised laundries, modern dining-rooms, mechanised bakeries, etc.; when the collective farmer sees that it is more to his advantage to receive his meat and milk from the collective farm's meat and dairy department than to keep his own cow and small livestock; when the woman collective farmer sees that it is more to her advantage to take her meals in the dining-room, to get her bread from the public bakery and to get her linen washed in the public laundry, than to do all these things herself. The future commune will arise on the basis of a more developed technique and of a more developed artel, on the basis of an abundance of products. When will that be? Not soon, of course. But be it will."

In the meantime, of course, the main problem then, and at the next Congress on the eve of the war, and still more after it, was to make the collective farms themselves more efficient and correspondingly more prosperous. We have seen that the references to the collective farms in the fourth Five Year Plan itself underlined these more immediate ends; and in the programme of activities for the rehabilitation of Soviet agriculture between 1947 and 1949, adopted within the framework of the Five Year Plan by the Central Committee of the C.P.S.U. early in 1947,¹ the appropriate targets for the collective farms were fixed with considerable precision. They included the increasing of the areas sown to cereals in 1947 and 1948 by the collective farms by over 25 million acres, out of a total increase of nearly 30 million acres throughout the Union; the restoration in 1947, in each collective farm, of the system of planning the areas sown to the principal grain

¹ Published in *Izvestia*, 28th February, 1947.

crops; the introduction of crop rotation as speedily as possible into all collective farms; big increases in livestock herds, and so on.

3. INDIVIDUAL INITIATIVE IN CO-OPERATIVE HUSBANDRY

At the beginning of this book reference was made to the vast extent of the agricultural destruction carried out by the Germans. It goes without saying that the repairing of this damage must necessarily retard for several years, and considerably complicate, the performance of tasks such as those just enumerated. But even more than in the management of Soviet industry and in productive work on individual machines, the very nature of the collective farm makes it certain that neither reconstruction nor further development can take place without the maximum initiative on the part of the individual member. It is not reasonable to imagine that the successful working of an enterprise organised in the way described a little earlier could dispense with that, or could rely upon some kind of super-bureaucratic management by the State—even in pre-war conditions, much less after the iron harrow of the Nazis had wrecked two-fifths of all the collective farms of the country.

For this reason the pages of the Soviet Press, both national and local, are always as instructive for the student of the rôle of the individual in Soviet agriculture as they are eloquent of his part in other branches of economy. No effort is spared to bring home to the Soviet citizen that in the machinery of a collective farm he has a decisive power in his hands, to wield for success or failure not only of his own personal housekeeping, but of the social unit which he governs—the collective farm—and through it of the country. Nor are successes allowed

to obscure how much work still has to be done. Thus, the Academy of Agricultural Sciences recorded, at a session in February, 1947, that 146,000 collective farms—three-fifths of the whole—were now applying the system of sowing perennial grasses, an almost threefold increase compared with what was being done in 1939.¹ But this, as we have seen, did not prevent the compilers of the fourth Five Year Plan from laying particular emphasis on this problem, and the subject scarcely disappears for a single day from the Soviet newspapers and economic journals. Something of the atmosphere of combat and individual struggle in which Soviet agriculture develops may be caught if we take examples of the way in which the Soviet Press deals with problems of *organisation and technique in the collective farms*.

On 31st January, 1947, *Sotsialisticheskoe Zemel'delie* published an editorial on the necessity for improving the organisation of labour on the collective farms, by abolishing jobs which had been invented in war-time and by sending collective farm members to work in the fields or look after cattle. For this purpose a review of quotas of output and rates of remuneration in work-days was necessary, and many collective farms were already looking to this. Quotas should be differentiated, taking account of the condition of the draught cattle and machinery used, so as to reward the most important and urgent field works best. Different piece-rates should be fixed for different jobs, making sure that people on secondary jobs or easy work were not getting as much as, or even more than, people doing complex or difficult work. Those directly engaged in growing grain and vegetables should be most highly paid.

Two days later the paper published a typically sharp

¹ *Soviet Monitor*, 28th February, 1947.

exposure of the suppression of self-criticism, and of its harmful effects. A case selected was that of the annual general meeting of the Shevchenko collective farm, Dnepropetrovsk region. Instead of a planned income of 401,000 roubles, the collective farm had made only 170,000 roubles: instead of 4300 acres of ploughland in 1946, only half this area had been ploughed. The State deliveries of grain and other produce had not been fulfilled according to plan. The management committee had taken no steps to fight the drought: there had been only one cultivation of the maize fields, and that very late, while the potato and vegetable allotments had been allowed to become overgrown with weeds. No measures had been taken to secure the repayment of 51,000 roubles owing to the collective farm by members who had left it.

The correspondent said that at first there had been no criticism of the disorganisers of the collective farm at the meeting, and the speeches of the chairman Kabris, the chairman of the rural Soviet Onopa, and the agronomist Gorbachevsky had not found it necessary to blame anybody or anything except the drought. A woman member of the collective farm, Likhoshva, had made a general onslaught on the committee, for not carrying out precise decisions of the last general meeting which would have prevented such failures. Thirty-five people had left the collective farm, she said, because the chairman paid no attention to their needs. The 125 acres of vegetable allotments had proved barren because there had been no organisation to look after them, and even now there were no teams organised for winter work in the cultivated fields. Although there were unmistakable signs of general approval for Likhoshva's attack, the vice-chairman of the collective farm, from the chair, hastened to smother the discussion, and after taking three confused votes in

succession, declared a motion of confidence carried. There had been no protest by the secretary of the Party organisation of the collective farm, Boboshko, or by the representative of the district committee of the C.P.S.U., who was also present at the meeting. It was obvious, the newspaper's reporter concluded, that the district committee of the Communist Party did not understand the political importance of the annual meetings of the collective farms, and had taken no steps to use them as a means of rousing the individual collective farmers to fight defects of organisation.

It is safe to say that this publicity must have brought a very speedy shake-up to the organisations in question.

An example of productive self-criticism was given by a reporter of *Pravda*, on 13th October, 1946, in his account of a general meeting at the Lenin collective farm, Kirsanov district, Tambov region. Here there were successes enough to be proud of—high yields, harvesting on time, plans of deliveries to the State over-fulfilled, autumn fallow ploughed up early, and so on. Nevertheless, the meeting on the question of waste of collective farm work-days was a noisy one. "We have been too generous with work-days," said the chairman, Fokin. "We put down work-days for everyone—the engineer at the radio relay station, the hairdresser, the telephone girl. As a result, administrative and overhead expenses have swollen greatly: we have been spending about 20% of the work-days on management." On the decision of the general meeting, the management committee stopped assigning work-days to persons not directly connected with collective farm production (those struck off, if their work was essential, being put on a wages basis of payment). The quotas of output were being reviewed, and a more strict registration of work-days introduced.

The question of the rôle of the individual in promoting better agricultural technique in the collective farm is a constant subject of care. The drought of 1946 naturally provided a great number of opportunities to show both good and bad work. The importance of initiative in this respect had already been shown much earlier by *Pravda*:¹

"In the autumn of 1944 there were very few rain-falls in the dry districts of the South-East. A serious menace to the harvest for 1945 was growing. The majority of collective farms and State farms succeeded in averting this menace by organising snow-retention in the fields. In the Saratov region it was carried out over an area exceeding a million hectares, in the Stalingrad region 600,000 hectares, in the Chkalov region 540,000 hectares. Over big areas snow was retained in the fields of the Penza, Tambov, Kuibyshev and Ulyanov regions. This had an important effect, by increasing the harvest this year in most of the collective farms and State farms of the South-East. . . .

"It is particularly important to carry out snow-retention for the harvest of 1946. Without this it will be difficult to preserve the sowings of winter grain and perennial grasses from freezing out, and to ensure the necessary supplies of moisture. . . . It will be particularly understandable when we bear in mind the inadequate ploughing of fallow for the spring sowings next year. . . ."

Pravda went on to demand that those collective farms and local party and Soviet organisations of the South-East which were showing slackness in preparing snow-barriers and shields, now that agricultural works for 1945 were coming to an end in the fields, should renounce their complacency. In many districts they were already

¹ Editorial, *Neotlozhnaya Zadacha Kolkhozov i Sovkhozov Yugo-Vostoka*, 6th December, 1945.

expressing the view that "a drought next year is impossible". Yet snow-retention was essentially a job involving work by hand. Because of this it was exceptionally important to draw into it as many able-bodied people in the collective and State farms as possible. "It is necessary to explain to the collective farmers, and to the workers in the M.T.S. and State farms, how particularly important snow-retention is in the fight for a big harvest next year."

As we know, there was a drought in 1946 in the southern areas, and it did find a number of collective farms unprepared. This lesson was brought home repeatedly in the Press, both good and bad results being freely published. An outstanding case of good work was that of a team in the "May 1st" collective farm, in the Vinnitza region of Ukraine, which grows sugar-beet. The team-leader, Maria Kozyrevich, wrote that,¹ following the record harvest which her team gathered in the autumn of 1945, she had been awarded a large money prize and a scroll of honour for the team and herself, and under the impression of this the team had decided to raise their output for 1946 to 60 tons per hectare. They had done the sowing well; but then came the heat-wave and the heavy drought. They went out watering the fields by hand every other day, and drew up a round-the-clock roster of duty, watching the young shoots, destroying the weeds and watering. They dug up one test hectare, and were delighted to find over 100,000 young shoots beneath the baked surface. They held daily conferences with the agronomist of the collective farm, Karp Timofeyevich, and gave a "direct feed" of fertiliser to the weaker plants. As a result, they were able to deliver a harvest to the factory of 50.4 tons per hectare—lower than their plan,

¹ *Sotsialisticheskoe Zemledelie*, 1st January, 1947.

but very satisfactory under the circumstances—and earned 6 cwt. of sugar per work-day each. The team had undertaken to grow 100 tons per hectare in 1947.

By the skilful accumulation of winter snow, wrote a correspondent of the same paper from Krasnodar, in the North Caucasus (16th January, 1947), the Budenny collective farm in the Bryukhovetsky district and the Komsomoletz collective farm in the Pavlovsk district, on fields which had scarcely received a drop of rain during the summer of 1946, secured a crop of 34–36 cwt. of winter wheat per hectare, and the “Gigant” State Farm an average of 28 cwt. of wheat per hectare over 28,000 hectares.

Commenting on these results, an editorial in *Sotsialisticheskoe Zemel'delie* (30th January, 1947) said it was not only a question of preventing the freezing of winter sowings, but of ensuring the maximum of humidity for the areas on which further sowing would take place in the spring. It drew the attention of collective farms to the researches of the Institute of Grain Economy of the South-East, which had established that, where snow was retained on the fields by shields and barriers, the yield of spring wheat had never been less than 1 ton per hectare in twelve years, while without this precaution it had fallen to as low as 8 cwt. per hectare. In years of drought, retention of snow could double the yield or more. It pointed to the work of a small collective farm, Kzyl Kuch, in the Tartar Republic, which had prepared 6000 shields in the summer, set them out before the snowfall, and had moved them four times as the snow accumulated: with the result that, in spite of a small total snowfall, the collective farm had accumulated a great deal. The next four to six weeks would be decisive: yet in the Saratov region the collective farms had carried out snow-retention measures

over just 14% of their million hectares of cultivated land, and in the Dnepropetrovsk region the proportion was as yet even smaller—44,000 hectares out of 450,000 hectares.

By such means the collective farms are incited to continuous rivalry in the sphere of technical improvements.

The responsibility of the *collective farm meeting* in this respect is of first-class importance, as we have seen. One may quote an example of a meeting reported as a model to others. The same newspaper (1st January, 1947) published a report of the annual meeting of the “Red Township” collective farm, in the Kaluga district. The year's work had been satisfactory: deliveries of grain and potatoes to the State had been in excess of plan, and the election campaign for the Supreme Soviet of the Russian Federation had been celebrated by a further sale of 5 tons of grain and 8 tons of potatoes to the State. In spite of the drought, they had gathered on the average 1–1.2 tons of grain and 3–3.3 tons of potatoes per hectare. They had restored pre-war rotation of crops and grasses, laid up all the necessary cattle fodder for the winter, and acquired some new machinery. The general meeting discussed a plan of immediate works, which involved a number of teams getting ready several cwt. of household ash and chicken manure in readiness for the spring, and urgent measures to complete storage and sorting of seeds.

Generally speaking, the annual meetings of collective farms provide many other indications of the variety of technical improvement which their superior organisation has made possible. One more illustration may be taken from the report of Prokhvatilov, secretary of the Stalingrad Regional Committee of the C.P.S.U. Despite the worst drought for many years, a number of leading collective farms had produced ample harvests, and had begun Socialist emulation in communicating their experiences

to the other collective farmers of the region. One consequence had been that the 1946 autumn ploughings by collective and State farms together, at 700,000 hectares, were more than twice as much as in 1945. Another result was that, out of 1625 collective farms, 1203 had already marked out their fields for proper crop rotation, and had completed all the agricultural works consequent upon this measure: existing plans provided for the remainder to complete the work in 1947. He gave an example of the type of emulation in progress—that of the collective farmers, machine and tractor stations and State farm workers of the Novo-Annensky district—who had pledged themselves by 9th February, 1947, to have all their machinery and agricultural implements in good repair, seeds fully sorted and tested, and snow-barriers and storage-pits for melted snow ready, while by 1st March all fuel for spring tractor work was to be purchased and delivered, and fertiliser, both mineral and animal, delivered to the fields.¹

Just as in industry, *the responsibility of Communists* in the countryside for giving a lead in organisation and good work is a constant element in the working of the collective farms. Moreover, stressed *Pravda* in an editorial on harvest problems (16th September, 1946), it was not only a question of providing a pattern of good work in the field teams and dairy units of the collective farms, but also of setting the example of bold criticism of weaknesses in the management. For this purpose it was essential, among other things, to put an end to the situation (developed in war-time conditions) when the secretary of the Communist group in the collective farm was at the same time chairman or vice-chairman of the farm itself, and thereby inclined to slur over defects. Furthermore, the importance of

¹ *Sotsialisticheskoe Zemledelie*, 1st January, 1947.

every Communist collective farmer carrying on political work among his fellow-members, explaining public policy and how it affected the interests of the collective farm, could not be over-estimated. This was particularly true now, "when hundreds of thousands of Communists have returned to the villages from the Red Army, after passing through the furnace of war and tempered in struggle against difficulties". In the course of the editorial and in its news-columns, *Pravda* gave a number of examples of the bad results when Communists failed to do their duty in this respect. Thus, the Minister for Agriculture, who was visiting Siberia, had given an interview to the paper vigorously criticising the lack of interest of regional and district organisations of the C.P.S.U. in such questions as rates of harvesting, use of combines and other harvesting machinery, the combating of wastage, slowness in drying the grain when it was in the collective farm barns, and so forth. At the same time, he drew attention to a decision of the active members of the Party in the city of Novosibirsk, which had decided to raise not less than 25,000 volunteers among workers and office employees of the city to help in the harvesting, and to send the secretaries of Party groups in the factories and offices of the city for a political drive in the collective farm and tractor stations. These measures would considerably facilitate the rapid gathering of the excellent Siberian harvest, so important for fulfilment of the new Five Year Plan.

Another example of the importance of active Communist work appeared in the same paper three days later, from Kursk, in central Russia. At the "Labour Banner" collective farm in this region there were only eight Communists, but by their personal example and their work as organisers and agitators they had secured remarkable results. It is worth noting that, as in most spheres

of Soviet life, the "agitator" is not necessarily a Communist: in this case no fewer than thirty-two agitators—i.e., at least twenty-four non-members of the C.P.S.U.—were carrying on the campaign for higher and better production in the brigades and teams of the collective farm. Over 300 of its members had, as a result, assumed definite obligations in the way of work, and both teams and brigades were competing. Results of each day's work were being tabulated and published in "Battle Sheets" (one-page "flashes", of which the example was set on a large scale in the front-line units of the Soviet Army during the war), in wall-newspapers and on special bulletin-boards. In consequence of this effort, the collective farm had completed its programme of grain deliveries in good time, over-fulfilled its plan for the sowing of winter crops, and was rapidly proceeding with the ploughing of those fields which had been harvested.

On 17th October, 1946, *Pravda* printed another characteristic account from the Tartar Republic. Here, in the "Kzyl Bairak" collective farm, there were only thirteen Communists and three probationer members, but as a rule fifty non-Party collective farmers attended their open Party meetings, and very many were taking part in the production campaign. It was a non-Party demobilised soldier, Zagidullin, who at one such meeting had made a number of valuable proposals for improving the work of a building brigade, which was repairing winnowing-machines, carts, barns and three bridges in the neighbourhood. By repairing an oil-engine which had been given up as hopeless, Zagidullin made it possible to release six horses from threshing work at the highest pitch of the summer campaign, and at the same time to reduce the period assigned for threshing by ten days. About this time a weather forecast received from the

district centre foretold an early change, with a long rainy period to follow. It became urgent to speed up harvesting and threshing by a longer and more intense working day, and this could only be done if the collective farmers were individually persuaded of its necessity. Although the village teachers—the most effective agitators—were on holiday, the Party meeting, on looking through the lists, decided there were at least ten other non-Party collective farmers, active in many ways, who could be asked to help in explaining to the members the danger ahead, and the need for going out to work two hours earlier than usual. "And our agitators assured the 3 a.m. start by the collective farmers," said Nabiullin, the secretary of the Communist group. "They themselves set a personal example: at 3 a.m. the collective farmers met the agitators already in the fields. In the dinner-hour they had talks with the members. As a result, we gathered in all the grain before the bad weather started, and had everything organised for uninterrupted delivery to the collecting station."

These examples are only two or three out of many thousands which could be quoted, at almost every season of the year, from the central and local Soviet Press. They give some indication, however, of the determining part played by individual effort of a voluntary character in the collective farms under normal conditions.¹

4. THE LEGACY OF THE WAR

But it must not be forgotten that Soviet agriculture after the war was faced with most abnormal conditions, con-

¹ To avoid misunderstanding, it should be borne in mind that there were groups of Communists in only 61,211 collective farms (i.e., about 25% of the total) on 1st March, 1947—and that was more than twice the proportion of pre-war days (*Pravda*, 13th March, 1947).

sequent upon the organised destruction and plunder carried out by hundreds of thousands of German soldiers under the direction of their officers. This work was not the ordinary license of war. It was inspired by the principle set forth by the Nazi Minister for Agriculture, Darre, in his notorious statement:

"In the entire eastern area only Germans have the right to be owners of large estates. A country inhabited by a foreign race must be a country of slaves—agricultural servants and industrial workers."

It was in virtue of this system that the Germans carried out the immense work of destruction and plunder in the agricultural regions which they occupied. The total value of reparations claimed by the U.S.S.R. from Germany—10 milliard dollars (53 milliard roubles)—would not suffice to make good even one-third of the destruction wrought by the Nazi armies to the collective farms alone (181 milliard roubles).

By no means the smallest of the consequences of the war for collective farmers was the disastrous shortage of agricultural machinery in the first year of the fourth Five Year Plan. For this reason, a new Ministry of Agricultural Machinery was set up after the war, and its increase of output in 1946 was by no means negligible—tractors 72% over 1945, combine-harvesters 349% compared with that year, tractor-drawn seed-drills 329%, threshing machines 278%, etc. Yet how far this was below urgent needs was indicated by the State Planning Commission in its statement of 20th January, 1947, when it reported that the Ministry had fulfilled its plan only 77%. The Soviet Government in its plan for 1947 (published on 1st March, 1947) made it one of the basic tasks of the country to "liquidate the lagging-behind of

the agricultural machine-building industry", as an essential step towards securing a bigger harvest. In its detailed directive to the various industries, the overall output of agricultural machinery in 1947 was fixed at 278% of the 1946 figure, with substantially higher percentages for particular machines like tractors and combines.¹

But it was not only these material losses which made more arduous the reconstructive work of collective farmers. War-time necessities and distraction of experienced organisers to other fields had also created problems of a different character, no less urgent.

At the end of 1929, at the very beginning of the great development in collective farming, Stalin had said:

"It would be a mistake to believe that, since collective farms exist, we have all that is necessary for building Socialism. It would be all the more a mistake to believe that the members of the collective farms have already become Socialists. No, a great deal of work has still to be done to remould the peasant collective farmer, to set right his individualistic psychology and to transform him into a real worker of a Socialist society. And the more rapidly the collective farms are provided with machines, the more rapidly they are supplied with tractors, the more rapidly will this be achieved. . . . The great importance of the collective farms lies precisely in that they represent the principal basis for the employment of machinery and tractors in agriculture, that they constitute the principal base for remoulding the

¹ Although the industry showed a huge increase in output during the first quarter of 1947, in comparison with the corresponding quarter of 1946 (tractors 193%, tractor-drawn ploughs 223%, tractor cultivators 900%, tractor sowing machines 397%), it still fell 9% short of the quarter's plan—so great was the need. By the end of 1947, its plan was completed 100% (*Soviet Monitor*, 18th January, 1948).

peasant, for changing his psychology in the spirit of proletarian Socialism."¹

Nearly ten years later, speaking at the XVIII Congress of the C.P.S.U. in March 1939, when the collective farms had had very great and astonishing successes, Molotov nevertheless pointed out:²

"There are still not a few among the peasants who show no concern either for the interests of the State, or even for the interests of their own collective farm, who think only of snatching as much as possible for themselves both from the State and from the collective farm. Here, too, serious measures are needed in the sphere of reinforcing discipline and in the sphere of education."

Further on, he gave an indication of what forms this weakness took:

"In many cases we have seriously neglected the problems of organisation and guidance of the collective farms. It is not by accident that lately we have had to take a number of steps to combat breaches of the collective farm regulations. Not without the influence of alien and directly wrecking elements, the interests of the subsidiary homesteads of the collective farmers have in some cases begun to be set up in opposition to the interests of the collective farm. Yet the peasants have only one certain path of improving their life further—the Bolshevik path of strengthening the collective farms. We must end breaches of the collective farm regulations, reduce the personal homesteads and individually-owned cattle of the collective farmers to due proportions, and put care for collective farm property and the strengthening of the collective farm in the first place. Then the

¹ *Leninism* (1944), p. 322.

² *Treti Pyatiletni Plan* (1939), pp. 12, 28-9.

subsidiary homesteads of the collective farmers will develop correctly as well. In this lies the way to the further advance of agriculture, to the abundance of produce in our country, to a prosperous and cultured life for all collective farmers. Questions of collective farm discipline and productivity of labour are also often quite neglected. Ought we not to face up to this question: to what extent is it normal when in collective farms there are not a few collective farmers—in name only—who for the whole year do not have a single work-day to their credit, or have only some 20-30 work-days, just for form's sake, so to speak? Are these real collective farmers, and must they enjoy all the advantages laid down by the State for the collective farms and collective farmers?"

This was one of the problems re-created to some extent by the war, owing to lack of proper management and control, and discussed in a far-reaching statement by the Soviet Government and the Central Committee of the C.P.S.U. This statement, adopted on 19th September, 1946, and published the next day, went much farther in its analysis.

The first defect was that in a number of collective farms the work-days were being wasted by (i) excessive appointments to office and administrative posts, to the detriment of the working strength of the collective farm, so that too many were in the offices and too few in the fields; (ii) chairmen of collective farms being liberal at the expense of their community, maintaining out of collective farm resources persons who had no connection with the collective farm, such as employees of the rural Soviet, etc.; (iii) work-days being assigned to people who either served the personal needs of individual collective farmers—hairdressers, cobblers, tailors—or were working for the rural and district authorities on building jobs, storage of

wood, carting and loading of goods. As a result, the total income available for distribution per work-day was diminished, and therefore the degree of interest of the collective farmers in working for the collective farm also diminished.

It is easy to see how such practices could have arisen in war-time, given the great shortages of produce of all kinds on the one hand, and the great numbers of inexperienced collective farm chairmen on the other. Later on, in March, 1947, it was revealed that, in 198,000 collective farms investigated since the war, only 28% of the chairmen had had three years' experience or more, and only another 34% had had from one to three years at their posts. The 38% who had been less than twelve months in their job, said Andreyev at the Central Committee of the C.P.S.U., were getting vast experience of a practical kind, but little agricultural education—"and to control a complex, large-scale, publicly-owned enterprise is a difficult job". (A whole network of six-month courses and one- and two-year regional schools for collective farm chairmen, team-leaders, collective farm dairy managers and book-keepers was set up in 1947, on Andreyev's proposal.)¹

The Soviet newspapers in the last months of 1946 published meanwhile many examples of waste of collective farm funds by weak managements. Thus, at the meeting of the "New Life" collective farm (Novosibirsk), one member said that in the second field brigade only five were working in the fields, while twelve were people like firemen, cooks, watchmen and others, daily credited with one and a half work-days without any right to them.² At Nepetsino, in the Kolomna district of Moscow region, the four collective farms had been making remarkable

¹ *Pravda*, 7th March, 1947.

² *Ibid.*, 23rd September, 1946.

progress up to and during the war, and in fact had succeeded in overcoming the effects of the drought in 1946. But in the course of 1945 there had been many cases of wasting work-days—by payments to watchmen of the rural Soviet, to wood-cutters and so on.¹

A second source of disorganisation had proved to be the handing over of collective farm lands, not only to individual members through the excessive increasing of their personal homesteads but—more often—by attaching collective farm lands to local authorities, factories, allotment-holders from neighbouring towns, and so forth. Here, too, the origin in war-time practice is not hard to see. In many cases local authorities had abused a decision of the Union Government taken in April, 1942. Under it, Governments of Republics and regional authorities, if no free land were available in towns, were given permission to allow factories, institutions, organisations and military units to cultivate unused lands of collective farms, with the consent of the latter. This permission—an essential measure for increasing output of foodstuffs in difficult war-time conditions, when the countryside was stripped of millions of its most experienced workers—had served as the pretext for the abuse already mentioned. Moreover, the high prices which collective farmers were able to secure for their surplus produce in the free collective farm markets—an important means of supplementing the meagre rations of the townspeople—had been an inducement in many cases, where the collective farm leadership had been weak, to increase the individual allotments of the members, as already mentioned, to the detriment of the lands worked collectively.

Here, again, many examples were given by the Soviet Press. At the "Iskra" collective farm in the Kuibyshev

¹ *Pravda*, 30th September, 1946.

region nearly 20% of the land was taken over by one of the local factories. At another collective farm in the same region more than 150 acres of the best land had been seized by various outside organisations.¹ At the Novosibirsk collective farm referred to earlier, the members learned at the meeting that, under pressure from district organisations, the management committee had distributed more than 450 acres to various institutions during the war. In one of the districts of the Yaroslavl region twelve collective farms had lost more than 330 acres between them in this way.² A preliminary indication of the proportion in which the land had been alienated was given by the Deputy Minister of Agriculture of Ukraine, who told a correspondent of *TASS* that the collective farms of this Republic had had returned to them 133,500 hectares of land which was being unlawfully used by various organisations and institutions, and 14,750 hectares of land which was wrongly alienated for the personal use of individual collective farmers.³ In order to preserve a due sense of proportion, however, it must be mentioned that the total land of the collective farms in Ukraine amounted in 1940 to over 35 million hectares (30 millions being sown to various crops).⁴ Thus, although the offences were serious, it would be out of the question to describe them—as some eager seekers for Soviet disaster did in foreign countries—as the “break-up” or “collapse” of collective farming: involving in the aggregate, as they did, less than 0.5% of the total crop area.

A third abuse was of a directly criminal character, when local authorities or responsible officials took cattle, grain, meat, milk, butter, vegetables, honey, etc., from col-

¹ *Pravda*, 22nd September, 1946. ² *Ibid.*, 26th September, 1946.

³ *Soviet Monitor*, 20th October, 1946.

⁴ Memorandum of the Ukrainian Delegation at the San Francisco Conference, 1945 (*Soviet Union at the San Francisco Conference*), p. 54.

lective farm stores without payment or at a low price, taking advantage of emergency powers with which they necessarily had to be invested in an invaded country.

In two regions of Ukraine alone, said the Deputy Minister in the statement just quoted, the collective farms had had returned to them 120 horses, sixty-five head of cattle, twenty-six houses and a large number of carts. In forty-four collective farms of one district in the Yaroslavl province, between 1944 and 1946, the district authorities had commandeered without consulting the collective farmers, and at nominal prices or free, the following property taken from the general funds of the collective farms: eighteen horses, forty cows, forty-two head of other farm animals, about 9500 litres of milk, over 3 cwt. of meat, more than 4 tons of grain and nearly as much potatoes, etc.¹ These examples might be multiplied.

A fourth breach of collective farm regulations which had occurred during the war was that, under plea of emergency, general meetings of the collective farmers in some areas had ceased to be held, with the consequence that chairmen and managements had not been re-elected, and the members had not had any control of such essential collective farm business as distribution of income, economic plans for the coming year, and disposal of the equipment and financial resources. As a result, managements in these cases had lost their sense of responsibility, and occasionally chairmen had been appointed by decision of the district authorities instead of by the members of collective farms.

“What right had the management committee, without consulting the members, to spend collective farm resources on ceremonial dinners in connection with the checking-up of emulation agreements with other collective farms?”

¹ *Pravda*, 15th November, 1946.

asked the members at a general meeting in the "Krashche Maibutne" collective farm of the Poltava region.¹ At the "Kraina Rad" collective farm of the Belolutsk district, Voroshilovgrad region, the district authorities at the end of 1945 appointed a new chairman, over the heads of the collective farmers. He had exchanged and sold collectively owned cattle, disposed of collective farm buildings and even of land to outside organisations, and taken cash and produce from the funds, without any consultation with the members.² It took a long struggle by a demobilised soldier, and interference by the legal authorities, to get the man removed. In the Arefino district of the Yaroslavl region the chairman of the district Soviet took a cow from the Voroshilov collective farm without consulting the members, and although at two meetings they had refused endorsement of his action, and had demanded the return of the cow, he was continuing his refusal to return it.³ Here, too, many more examples could be quoted.

In their extensive decision of 19th September, 1946, the Council of Ministers and Central Committee of the C.P.S.U. required that all authorities should take urgent steps to put an end to all these abuses within two months, and to return all lands and property taken from the collective farms against collective farm regulations; and forbade all local authorities to interfere with appointments in the collective farms apart from general meetings of the members. In every collective farm throughout the Soviet Union general meetings were to be held, to hear reports from their management committees on their work in 1946 and to carry out fresh elections, should this seem good to the members: this to be completed by 15th

¹ *Pravda*, 22nd September, 1946. ² *Ibid.*, 23rd September, 1946.

³ *Ibid.*, 15th November, 1946.

February, 1947. In order to guard against any such abuses in the future, the Government set up a Council for Collective Farm Affairs, which was also to work out measures for improving the collective farm regulations and extending the socially-owned economy of the collective farms. In order to do its work of preparing appropriate measures for the Government, it would have a number of inspectors and supervisors in the localities, independent of the local authorities.

Out of the thirty-nine members of the Council, twenty-two were themselves chairmen or leading workers of collective farms scattered throughout the U.S.S.R., and one the manager of a machine and tractor station. The Council also included the Minister of Agriculture of the U.S.S.R., the deputy chairman of the State Planning Commission, and leading public men in territories important for agriculture in the immediate future, like the Prime Ministers of Ukraine and Kazakhstan, and the secretaries of the Communist Party of Uzbekistan and of the Krasnodar Territory Committee of the C.P.S.U. A. A. Andreyev, Deputy Prime Minister of the U.S.S.R., was appointed chairman of the Council.¹

The appointment of this Council and the organisation of the general meetings were widely welcomed in the collective farms; and the proceedings at their general meetings during the next few months showed conclusively that Zhdanov, secretary of the Central Committee of the C.P.S.U., was right when he said in his anniversary review on 6th November, 1946, that the decisions had "armed all honest collective farmers with a powerful weapon for establishing order in the collective farms and for restoring the mainstays of collective farm life which had been violated in many places".

¹ List published in *Pravda*, 9th October, 1946.

In point of fact, the decisions gave rise to a new and higher advance of Socialist emulation in agriculture.

5. SOCIALIST EMULATION IN THE COUNTRYSIDE

We have seen that Socialist emulation among the peasantry was a later development, at least on a mass scale, than in industry. The reasons for this are obvious, and were summed up by Stalin in his speech of 1929 quoted earlier. Yet Stalin himself, when moving the adoption of the new Soviet Constitution at the VIII Congress of Soviets of the U.S.S.R. on 25th November, 1936, said: ¹

"Our Soviet peasantry is an entirely new peasantry. In our country there are no longer any landlords and kulaks, merchants and usurers who could exploit the peasants. Consequently, our peasantry is a peasantry emancipated from exploitation. Further, our Soviet peasantry, its overwhelming majority, is a collective farm peasantry, *i.e.*, it bases its work and wealth not on individual labour and on backward technical equipment, but on collective labour and on up-to-date technical equipment. Finally the economy of our peasantry is based, not on private property, but on collective property, which has grown up on the basis of collective labour.

"As you see, the Soviet peasantry is an entirely new peasantry, the like of which the history of mankind has never known before."

In March, 1939, Molotov was able, as we have seen also, to point to the fact that a similar movement to that of the Stakhanovites in industry was developing more and more in the collective farms, where the "Stakhanovite workers are calling by their glorious deeds to the advanced col-

¹ *Leninism* (1944), p. 566.

lective farmers". There were team-leaders, tractor-drivers, combine-drivers, who were showing achievements in this respect such as had never been seen before, he said: the whole nation knew the names of tractor-drivers like Pasha Angelina and Pasha Kovardak, the collective farm team-leader Maria Demchenko, the combine-drivers Kolesov and Borin, and many others.

During the war the Socialist emulation practised in agriculture played a most important part in ensuring adequate supplies. One typical example is that of the fertile Tambov region, where 50,000 women had in war-time conditions to take over leading posts in the collective farms—400 as chairmen, 2800 as directors of dairy units in the collective farms, and the others as committee members, team-leaders, etc. In the spring of 1943, 170,000 women collective farmers, gathering at meetings throughout the Tambov region, discussed, adopted and signed a challenge to the whole country to rival them in the sowing and harvesting.¹ This challenge, taken up all over the U.S.S.R., was directly responsible for the remarkable results in agriculture that year which have already been mentioned. Again, 1944 was a year of emulation among collective farm youth; 200,000 young tractor-drivers, organised in 20,000 brigades, and 400,000 young field workers, in "youth groups for a big harvest", were engaged in it, influencing by their work far larger numbers.²

In the conditions of post-war planning, with all their difficulties, setbacks and reconstruction problems set forth in the preceding pages, it was only to be expected that the spirit of Socialist emulation should once more reassert itself; and this it did most decisively.

¹ *U.S.S.R. Speaks for Itself* (1943), p. 15.

² *Bolgov, Sila i Zhiznennost Kolkhoznogo Stroya* (1945), pp. 23-4.

The first step was taken by meetings in the collective farms, State farms and machine and tractor stations of the Altai Territory in south-west Asia, which adopted the text of an open letter to all those working in Socialist agriculture throughout the U.S.S.R. They said that in 1946 they had had a magnificent harvest, with hundreds of collective farms gathering in 25 cwt. and more per hectare of first-class Siberian wheat. Healing the wounds left by the war was no easy task, and every effort must be made if the country was to move ahead once again to prosperity and strength. In their open letter (published in *Pravda* on 29th September, 1946) they undertook (i) that each collective farm and State farm individually would fulfil the year's plan of grain deliveries to the State ahead of time—by 30th October, 1946; (ii) that by the twenty-ninth anniversary of the Socialist Revolution (7th November) they would deliver about 100,000 tons of grain over and above plan; (iii) that they would fulfil their plan for ploughing autumn fallow before the snow, thereby ensuring a firm foundation for a big harvest the following year. They called upon all workers in Socialist agriculture to follow their example, and in particular, they said, "We challenge our neighbours, the men and women collective farmers of the Novosibirsk and Omsk regions and Krasnoyarsk territory, to undertake obligations and enter into Socialist emulation with us."

The effect of the discussion of this manifesto upon the Altai collective farmers themselves can be well illustrated from the following sketch which appeared in *Pravda* the next day, from a special correspondent who was visiting the village of Shadrino, Kalman district, Altai territory:

"This heart-to-heart talk took place in the dinner-hour at the collective farm meeting, in a field shelter. Out of the windows you could see the piles of grain,

and further off the numerous ricks, which reminded you that the collective farm had laid a firm basis for further growth.

"The chairman of the management committee, Alexei Kazakeyev, was a soldier who had seen the world: he was in the defence of Moscow and Stalin-grad, the liberation of Warsaw and the capture of Berlin. Returning to his native village of Shadrino on the Ob, he was elected chairman by the general meeting, and was now gathering in his first post-war harvest.

"The draft open letter of the Altai collective farmers was read at the meeting, and like a good husbandman, Kazakeyev had carefully thought over the clauses setting forth the obligations which the Altai people themselves were assuming.

"'We give first grains from every ear to our country for the sake of the future', he began the talk. 'There's not much more to reap—about 50 hectares. That's about three days' work. But here's the weak spot—grain deliveries are only 60% complete.'

"Then there followed calculations of how many carts had to be sent out daily to complete deliveries. They decided to complete them not later than 20th October, at least ten days before the date fixed for completion throughout the territory. Everybody would have to buckle to, the harvest effort wasn't over.

"'Bear in mind that when we adopt this letter, we are giving our word to Stalin, and that means that everyone must do as we have written. . . . I have called a neighbour to our meeting,' added Kazakeyev. 'You know him, he's chairman of the Kuibyshev collective farm. He's from our village, and you can see their lands from here: there they are, beyond the ravine. And we should like him to tell us how they are managing on those lands.'

"The chairman of the Kuibyshev collective farm

told them about his affairs, and they overwhelmed him with questions.

" 'Why have you delivered to the elevator only one-third of the planned amount? You could have carried more there by hand!' 'When are you going to finish the mowing?' 'One more question. Why does it take you ten days to dry the grain in the barn? Because you don't get it there in time. Rain falls, and you have to begin all over again. Your labour is badly organised.'

"In fact, while spending an equal number of work-days, the hosts had dried out four times as much grain as the Kuibyshev collective farm.

" 'Your grain may go to ruin,' said the chairman to his neighbour. 'Haven't some of you forgotten the meaning of that holy word—grain?'

"Then they asked the chairman of the Kuibyshevites how many head of cattle Elena Lazareva had. 'Six head,' replied the chairman. 'That's just it, six! She mows hay for her cattle on collective farm land. And now that she's finished mowing, she sits making lace all day.'

" 'Why have robbers of that kind got such individual vegetable allotments that you can't see from one end to another? How is it they have got draught oxen for their personal use? Do you ever take a look at the collective farm regulations? Every letter of them is for the benefit of the collective farm and honest farmers, but you are breaking them.'

"The chairman of the lagging collective farm was bright red and perspiring, but the prickly sharp criticism went on. He said in self-defence that he had eleven wounds and was working himself to death. To this, Alexei Kazakeyev replied:

" 'Now look here, brother Nikolai, I did some fighting too. For our past services we've got honour and respect from the people. But it's time now to think about new ones.'

"The chairmen of these two collective farms are

brothers, and the criticism, coming from the very depths of Alexei's soul, was bound to affect Nikolai deeply.

"They adopted the open letter unanimously. They added their own resolution: 'Let our words from the Altai reach every village, and may the backward collective farms, in the course of emulation, fall into step with those in the lead.'"

The effect of the Altai challenge was still more striking outside the territory: and one after another the various agricultural districts of the U.S.S.R. began their response. In the neighbouring region of Novosibirsk general meetings of the collective farmers discussed the open letter and the lines of a reply. At a field meeting in the "March 8th (International Women's Day)" collective farm, the members decided they could deliver another 20 tons of wheat above plan, and would challenge in their turn the collective farmers of the Kemerovo and Tomsk regions and of Kazakhstan.¹ An open pledge of the collective farms in the Krasnoyarsk territory responded to Altai by undertaking to complete State grain deliveries by 1st November, and by 7th November to deliver more than 30,000 tons of grain above plan; and challenged the collective farmers of the Irkutsk region and the Khabarovsk and Maritime territories in the Far East. The Kemerovo region undertook, in addition to similar obligations, to complete all deliveries of potatoes and vegetables to the State by 1st November.²

The movement, however, spread far beyond the Asiatic territories of the U.S.S.R. Meetings of collective farmers in the Salsk district of the Rostov region, reporting that in 1946 they had gathered a harvest of more than 26 cwt. of grain per hectare, and that the largest State grain farm,

¹ *Pravda*, 2nd October, 1946.

² *Ibid.*, 3rd October, 1946.

"Gigant", situated in their district, had over-fulfilled its plan, delivering 25,000 tons of grain to the State, undertook to fulfil the grain-delivery plans of each collective and State farm by 15th October, to deliver more than 3000 tons of grain above schedule by 7th November, to complete the plan of autumn sowings of 75,000 acres, with 2500 acres in addition above plan, and to complete the autumn ploughing by 7th November.¹ Similar resolutions were adopted in other areas, such as the Kalinin region, which had known all the horrors of German occupation, and Ukraine, where it was notable that the collective farms in regions returned to Soviet Ukraine as a result of the war, after twenty years under the yoke of Polish landlords—such as Lvov, Drohobych and Rovno regions—were particularly active in delivering grain to the State above plan, to a total exceeding 4000 tons.²

Equally striking in this respect was the response of the peasantry of Soviet Lithuania, where collective farms had not been introduced as yet, and where the Soviet State had confined itself to promoting simple agricultural co-operation, granting credits and mechanical aid. (This also applied to the other Baltic Soviet Republics. In Estonia, at the end of October, 1946, there were 1377 agricultural co-operative societies, with about 100,000 homesteads organised in them. In Latvia, on 1st February, 1947, there were 1203 societies, covering 121,000 homesteads—nearly 50% of the Latvian peasant families. Only in the course of 1947 were the first collective farms organised in these Republics.)

The letter of the Lithuanians ran: ³

"The age-old dream of the Lithuanian peasantry has come true: 86,000 landless and poor peasants

¹ *Pravda*, 3rd October, 1946.

² *Ibid.*, 21st November, 1946.

³ *Ibid.*, 9th October, 1946.

have received 1½ million acres of land for use, without limitation of time and without payment. They have had 7000 draught horses and more than 17,000 head of cattle from State funds. The Soviet Power granted the working peasants more than 15,000 tons of seed on credit out of its reserves. To help the newly settled peasants and the poorer households, our Republic has set up 58 machine and tractor stations and 246 machinery and horse-leasing depots."

The Lithuanian peasants undertook to deliver 15,000 tons of grain to the State by 7th November, over and above their plan, to complete their planned deliveries of milk by the same date, and to plough up in the autumn all the land destined for the spring sowings of 1947. They also issued a challenge to the peasantry of the Latvian and Estonian Soviet Socialist Republics.

The movement was not confined to grain-growing areas. Cotton-growing Republics—Georgia and Azerbaijan in the Caucasus, Tadjikistan and Turkmenistan in Central Asia—developed a similar wave of emulation. As a result, the State plan of cotton harvesting and deliveries throughout the U.S.S.R. was completed by 106% on 10th December, *i.e.*, three weeks ahead of schedule.¹

At the Supreme Soviet of the U.S.S.R., assembled to discuss the 1947 Budget, the deputies on 21st February, 1947, heard a report by deputy Belyaev, representing the Altai territory,² on the fulfilment of its people's pledge: it turned out that they had delivered not 100,000 tons but 200,000 tons of grain to the State above their programme. Their area under crops had increased by 90,000 acres, and the yield by 130%. Many other regions had similar successes. It was this fact that made it possible for the gross harvests and marketed grain output in 1946, though

¹ *Soviet Monitor*, 15th December, 1946.

² *Izvestia*, 25th February, 1947.

somewhat less than in 1945, to be "incomparably higher" than in 1921, despite the drought, which, as we have mentioned, affected a territory larger than that stricken twenty-five years before.

By the end of February, 1947, all machine and tractor stations in the liberated regions had in the main been restored, great assistance in cattle, seeds and fodder rendered by the State, and a large number of cottages and farm buildings rebuilt with Government help. Thanks to these measures, the collective farms and individual peasants of the liberated regions in 1946 sowed from 75% to 100% of their pre-war cultivated area, and their cattle herds exceeded 50% of the pre-war figure.¹

The decisive results of the resolution of 19th September were made known in a report by Andreyev, as one of the leaders of the Communist Party, to a meeting of its Central Committee in March, 1947. Just over 11½ million acres had been returned to the collective farms. While this showed how serious were the depredations (Andreyev said there were 2¼ million cases in all), it is as well again to remember, for the sake of due proportion, that the total of cultivated land alone which the collective farms held in 1940 amounted to 290 million acres. Moreover, to avoid hasty conclusions as to the degree of revival of the individualist spirit which even the figure of 11½ million acres implies, it should be noted that of this total just under 10 million acres were "rescued" from organisations and institutions, and not from individuals. The area which had to be restored by individual collective farmers, in particular, was 1,287,000 acres, as against 4,922,000 acres restored in 1939, after Molotov's speech at the XVIII Party Congress. 140,000 head of cattle illegally taken

¹ Resolution of the Central Committee of the C.P.S.U. on measures for restoring agriculture after the war (*Izvestia*, 28th February, 1947).

from the collective farms had been returned to them (they owned nearly 16 million head on 1st January, 1947, apart from 6½ million horses, 39 million sheep and goats, and 2½ million pigs). Finally, the administrative and auxiliary personnel dismissed, and other persons removed from the pay-roll as unconnected with the collective farms, numbered 638,000.¹

The feeling that the worst difficulties in the post-war readjustment of agriculture had been weathered, and the impetus to self-examination and critical appraisal of management methods given by the Soviet Government's decision of 19th September, made the annual general meetings of the collective farms in the first months of 1947, in particular, much more than an occasion to put right abuses. Even a sample selection of reports in the Soviet Press shows that the prevailing note was one of preparation for a still higher advance of emulation in the coming months. Some examples of this have already been given: a few more may be usefully quoted.

The Socialist emulation of collective farms in the Moscow region was discussed at a meeting of the regional committee of the C.P.S.U. on 16th January, 1947. Kuprianov, secretary of the Ramenskoye committee, reported that the collective farms of his district had challenged those of the Lukhovitsky district. Annual meetings had been discussing methods of getting seeds ready for the sowing in spring, maximum weights of fertiliser delivered to the fields, dates for repair of agricultural implements, attraction of maximum numbers of collective farmers into agricultural study groups, etc. In the Podolsk district, reported its secretary, members of the Pavlovsk and Beletovsk collective farms had, in the process of emulation, undertaken to raise their yields of

¹ *Pravda*, 7th March, 1947.

grain to 2 tons per hectare, potatoes to 18 tons per hectare and cabbage to 40 tons per hectare.¹ In Latvia, where the peasants in 1946 had increased their grain harvest by 12% and their sugar-beet output by 50%, compared with 1945, Socialist emulation had led to completion of grain deliveries before date and their over-fulfilment by 11,000 tons. Over 1100 agricultural co-operative societies were preparing to sow scores of thousands of acres of additional lands in the spring, supplied from State reserves.²

One more example may be taken from a different sphere, described in a Press report from Stalinabad, capital of Soviet Tadzhikistan, and dated 25th January, 1947. The leading collective farms in the Leninabad region of this Republic had offered its Ministry of Water Supply to do supplementary work at building dams on that sector of the Fergana Grand Canal, then under construction, which went through the territory of the Republic. Their aim was to increase its flow capacity by 40-50%, and to improve the planned irrigation of cotton and lucerne fields and orchards in three districts of the region. The offer was accepted, and the authorities supplied the necessary equipment and other facilities. About 8000 collective farmers with their own transport turned out for the work, and Socialist emulation was organised from the very beginning. The undertaking coincided with the campaign of review of the year's achievements in connection with the forthcoming elections to the Supreme Soviet of Tadzhikistan. As a result, the work was completed five days ahead of schedule.

There are hundreds of such examples in the Soviet newspapers. They leave no room for doubt that, while all is far from perfect in the organisation of Soviet agri-

¹ *Izvestia*, 17th January, 1947. ² *Ibid.*, 24th January, 1946.

culture, the collective farming system, so far from stifling individual enterprise and initiative, has on the contrary developed it and gives it still further scope, on a scale inconceivable previously.

The first few months' working of the Council for Collective Farm Affairs, moreover, brought increased attention to the problem of stimulating the individual by still greater preciseness in the remuneration of collective farm labour, in keeping with its quality as well as its quantity. Practices which were new and stimulating when the Collective Farm Statute was adopted in 1935 had become out-of-date, Andreyev reported at the Central Committee meeting already mentioned.¹ They were hindering progress in some cases. For example, payment of teams according to the value of the working days they put in—even allowing for differences of skill between member and member—was no longer a sufficient stimulus to better production, if the results of their work were not also taken into account:

“In the ‘Red Dawn’ collective farm, Kursk region, there are in two units of one of the teams the same number of able-bodied members and the same sown area. Buryachenko's unit raised a harvest of 16 cwt. per hectare, with a total of 2200 work-days; Rudenko's unit raised less than 7 cwt. per hectare, but showed 2300 work-days. Yet although working less efficiently and providing half the harvest, Rudenko's unit received more grain from the collective farm, because it had more work-days to its credit. Another example. In the ‘Kzyl-Tulkun’ collective farm, Tashkent region, Begimkulov's unit in 1945 gathered a cotton harvest of 56 cwt. per hectare, while another unit, Kuldashiev's, gathered 30 cwt.: yet both received the same payment. . . .”

¹ *Pravda*, 7th March, 1947.

Of course this was unfair, said Andreyev. It was necessary to make payment depend to a certain extent on yields as well as on work-days. Collective farms in various parts—Ukraine, Kursk, Gorki, Uzbekistan—were already experimenting in this field.

The results of such changes, and of Socialist emulation in all branches of collective farming (for example, the 58% increase in the gross harvest of 1947, compared with the previous year), were calculated to strengthen the conviction of Soviet citizens that, in agriculture no less than in industry, public enterprise and social planning can be effectively combined with the utmost scope for the individual.¹

¹ At this point it is appropriate to comment on the remarkable discovery of a Special Correspondent of *The Times* (27th March, 1947) that the German invader destroyed, not only material equipment, but "the whole collective farm system"—presumably, since it is not the material part of the system, the moral part as well. "All over the Ukraine . . . and in the most fertile regions of the Volga," wrote the correspondent (as though to underline this point) not only had land to be reclaimed, fertilisers supplied, houses rebuilt and population resettled, but also "the collective system re-established—not without opposition, active and passive, from stubborn peasant individualism." Over large areas, he summed up, what was required was "the re-collectivisation as well as re-equipment of agriculture, with all that that implies". These assertions, full of ambiguous hints and dark allusions, are nevertheless quite unmistakable in their general drift.

The correspondent did not quote any evidence of this momentous emergence of "stubborn peasant individualism", nor yet of the Germans' alleged success in destroying the moral or political bases of Ukrainian collective farming. He could not do so, because the evidence was not there. Among the mass of evidence to the contrary, contained in the news columns of the Soviet Press, perhaps it is sufficient to mention the following. *Izvestia* of 22nd February, 1947, published a letter to Stalin from a conference of collective farmers, individual peasants, State farm and M.T.S. workers, agricultural technicians and scientists of Ukraine. It announced that, in spite of "enormous destruction" wrought by the Germans, all the collective farms had been restored (there were 26,919 in 1940, and 27,006 in 1947), 713 State farms (out of 875 in 1940) and 1240 machine and tractor stations (in 1941 there were 1225). The area

under crops in 1946 was 81.2% of pre-war, and the collective farms had completed the State spring sowings plan 102.2%. Thousands of collective farms were engaged in Socialist emulation. *Izvestia* had already reported (13th February) that the collective farms of Ukraine had carried out snow-retention measures in the winter of 1946-47 over an area of 7½ million acres (1 million acres more than the plan). Truly astonishing examples of "stubborn peasant individualism"! It should be added that by mid-October, 1947, the Ukrainian collective farmers had gathered in a bumper harvest, completed grain deliveries to the State nearly three weeks ahead of schedule, and over-fulfilled the plan of winter sowings for the 1948 harvest, increasing the area under wheat by 1½ million acres. Ukrainian collective farmers were among the first to respond, in the first months of 1948, to a new appeal of the Altai grain growers for nation-wide Socialist emulation to make 1948 the "decisive year" of the fourth Five Year Plan—by bringing crops, yields and numbers of collective farm livestock up to or past the pre-war level (*Soviet News*, 19th April, 1948).

CHAPTER V

TRADE IN THE SYSTEM OF SOVIET PLANNING

I. THE DEVELOPMENT OF SOVIET TRADE

THE tasks of organisation falling upon the managers of Soviet trade, and the opportunities for individual initiative both of managers and of employees, do not differ in their substance from those which exist in Soviet industry and agriculture. Yet there are some particular features of a trading system, the essence of which is to connect an industry almost 100% socially owned with an agriculture working on land all of which is public property, and in which about three-quarters (in value) of the total means of production are State-owned (State farms and machine and tractor stations), while four-fifths of the remainder are co-operatively owned (by the collective farms). These particular features deserve some special attention, if only because they provide different opportunities for individual initiative.

Even today some of the machinery of Soviet trade bears the mark of its origin in the period of the New Economic Policy. At that time the Soviet State, reducing its direct control over production to a minimum number of large enterprises in basic industry, found itself surrounded by an ocean of smaller workshops in the towns and petty individual peasant enterprise in agriculture—from which source it had to derive the raw materials for its industry and the foodstuffs and household needs for the town

population, the factory workers and the armed forces.¹ In these conditions, Lenin wrote:

“The proletarian State must become a cautious, calculating, skilful ‘boss’, a regular *wholesale merchant*—otherwise it cannot put a petty peasant country economically on its feet: and there is no other transition to Communism today, in existing conditions. . . . Wholesale trade unites millions of petty peasants economically, interests them, binds them together, leads them up to the next stage: to various forms of connection and amalgamation in production itself.”²

The lesson was not learned easily, and the learning went through many stages, which it is not the purpose of these pages to describe. For several years private capital still played an important part in wholesale trade, and for a longer period in retail trade. By their joint efforts the special trading organisations formed by the State and the co-operative movement which it encouraged forced private trading capital out of business, making many mistakes in the process.

From the first, of course, the State had at its disposal a wide variety of measures for indirect economic regulation, and above all a clear idea of the direction in which it wanted Soviet economy as a whole to move. With this perspective, it was able to go into the market with some certainty of success. One example may be given here. In order to control the grain market—more important than any other, in the early years—the State fixed firm prices for its own purchasing organisations and for those of the co-operative societies, in order to present a united front to the private wholesaler. It formed special grain

¹ For this period, as indeed for the whole history of Soviet economy, see M. H. Dobb's *Soviet Economic Development since 1917*.

² *Works* (3rd Russian edition, 1931), vol. xxvii, pp. 29–30.

reserves for "intervention" in the market in the spring and early summer, when as a rule the kulak appeared with his hoarded grain at speculative prices, to take advantage of the helpless poorer peasant. The State supplied the big towns and low-harvest districts with cheap grain, for the same purpose, and took steps in the larger cities to develop a publicly-owned network of mechanised bakeries and flour-stores. It provided low transport freights on its railways for grain moving to the big centres. It arranged its grain purchases by districts in accordance with harvest periods, supplied adequate quantities of manufactured goods to the countryside to stimulate the maximum sale of grain, and so forth.¹

A certain degree of progress in industry, in mastering the technique of wholesale trade and in ensuring the collection of reliable statistics, was essential before such a system could become fully effective. However, by April, 1929, Stalin could say that trade in the Soviet Union was free "within certain limits, within certain confines, with the proviso that the rôle of the State as regulator and its rôle in the market are guaranteed. . . . We, in the main, determine the price of grain. We determine the price of manufactured goods. We strive to carry out a policy of reducing costs of production and reducing prices of manufactured goods, while striving to stabilise the price of agricultural products. Is it not obvious that such special and specific market conditions do not exist in capitalist countries?"²

When Stalin spoke of this success he was able at the same time to show that Soviet trade was passing into a new phase. The peasants were signing contracts with State industry, under which the latter would supply manufactured goods, seed and implements of production in

¹ Sorokin, *op. cit.*, pp. 40-1.

² *Leninism* (1944), p. 263.

pre-arranged quantities, while the peasantry did the same in respect of raw cotton, beet and flax. This introduction of a contract system where previously there had been the free play of market relations—however weighted in favour of the State—was bound to "mark a big step forward on the part of our organisations in respect of strengthening the planned, Socialist control of national economy".¹ So it proved. The agricultural co-operative societies through which the peasants concluded these contracts prepared the way in a couple of years for the turn towards collective farming—which also, as we have seen, reflected a higher stage reached by the State in respect of industrial production, thanks to which it could offer the peasants the necessary material assistance.

Trade in these conditions took a new form. Both agriculture and industry acquired an increasingly planned character. By January, 1933, at the end of the first Five Year Plan, Stalin could declare:²

"Soviet trade is trade without capitalists, big or small: it is trade without profiteers, big or small. It is a special form of trade which has never existed in history before, and which is practised only by us, by the Bolsheviks, in the conditions of Soviet development."

By this time, statistics showed, it was the organised market—that which worked according to a broad plan, and operated between State-owned organisations, or between them and collective farms—which was of decisive importance in the exchange of goods within the country. The unorganised market, where the individual peasant appeared as trader, was "only of subordinate importance".

Some indication of the results of this system is given by the fact that the total volume of commodities exchanged

¹ *Leninism* (1944), p. 267.

² *Ibid.*, p. 432.

for individual consumption through the socially owned retail machinery was 88% larger in 1932 than in 1928; and it had proved necessary to increase the network of co-operative and State trading establishments from 156,000 to 271,000. In the course of the second Five Year Plan—from 1932 to 1937—the turnover of commodities increased by 150%,¹ and the numbers of State and co-operative trading units by over 20%.² During the second Five Year Plan the quantity of butter on the market increased by 300% of the 1932 figure, and of sugar by over 180%; of soap by nearly 160% and footwear nearly 140%; while cotton goods increased by 91% in quantity, and woollens by over 230%.³

The aims of Soviet trade, fully developed, were stated by Stalin with the utmost clarity at the XVII Congress of the C.P.S.U. in January, 1934:⁴

“The country must be covered with a vast network of wholesale distribution bases, shops and stores. There must be a ceaseless flow of goods through these bases, shops and stores from the producer to the consumer. . . . The direct exchange of products” (*i.e.*, not through trade machinery, but by direct distribution) “can replace, and be the result of, only a perfectly organised system of Soviet trade, of which we have not a trace as yet.”

What differentiates Soviet trade from trade in other countries is not, of course, the physical method of ensuring the maximum supply to the consumer of all that he may need, in the variety he desires and as smoothly as possible

¹ *Leninism* (1944), p. 640.

² 271,000 on 1st January, 1933 (*Summary of Fulfilment of First Five Year Plan*, Moscow, 1933, pp. 210, 212), and 327,000 on 31st December, 1937 (*Leninism* (1944), p. 640).

³ Arutinian and Markus, *Razvitie Sovetskoi Ekonomiki* (1940), p. 527.

⁴ *Leninism* (1944), pp. 513, 551.

—in that respect there are still many shortcomings—but the primary purpose for which its machinery works. The transformation of Soviet commodities into cash has the primary object, not of providing private profit, but of checking the ability of socially-owned enterprises and trading organisations to give the consumer—the mass of the population—what it requires. The transformation of the consumer's cash into the commodities which he buys, again, has no element in it of profit for any private enterprise:¹ it serves as the direct means by which the citizen is recompensed precisely according to the quantity and quality of labour he or she has contributed to social enterprise—an economic law to which there are no exceptions in the U.S.S.R. for the able-bodied.

Thus the system of Soviet trade is essentially bound up with the existence of money. The continued existence of money in the U.S.S.R. has roused at times as many questions as the existence of trade, and one may therefore usefully quote the most exact statement made on the subject by Stalin, at the Party Congress in 1934. He said then² that “we shall use money for a long time to come, right up to the time when the first stage of Communism, *i.e.*, the Socialist stage of development, has been completed. . . . Money is the instrument of bourgeois economy which the Soviet Power has taken over and adapted to the interests of Socialism, for the purpose of expanding Soviet trade to the utmost, and of thus creating the conditions necessary for direct exchange of products.”

¹ The only passing and abnormal exception was in the war and post-war years (1941–7) before production and distribution of consumer goods had recovered from war-time dislocation, and when a certain volume of semi-legal speculative petty trade—intermediary between the collective farm market and the consumer of foodstuffs, or between the town retail stores and the village consumer of manufactured goods—made its appearance.

² *Leninism* (1944), pp. 512–13.

In its resolution on immediate economic problems, the same Congress declared that Soviet money, the Soviet rouble, was "a most important lever for reinforcing cost accounting and for strengthening the economic links between town and country".¹ Thus at bottom, the resolution implied, economies of every kind in the sphere of trade must serve the same purpose of strengthening the general advance towards Socialism—including Socialist planning—as they did in the sphere of industry.

We have already seen the practical advantage which the use of money still affords in industry and planning, even though money in the U.S.S.R. has for all effective purposes lost the power to breed more money for its individual owner. The same advantage is served in trade. The Socialist State uses the method of planned prices, both wholesale and retail, as a means for promoting the planned redistribution of labour and of the means of production. It is a subordinate means, but nevertheless an effective one. The turnover tax, which was touched upon in Chapter II, is an illustration. And of course the use of prices also involves the use of money.

It must be emphasised that here, too, Soviet money cannot become *capital*: it cannot become a means whereby the labour of others can be commanded, and consequently cannot become a commodity which dominates man. Such devices as artificial shortages in order to raise prices, profiteering by taking advantage of real shortages to raise prices, the cornering or monopolising of commodities with the same end in view, are not merely impossible in normal Soviet trade,² but are anti-Soviet crimes, punishable severely by law.

¹ *XVII Svezd VKP(b)* (1934), p. 668.

² With the temporary exceptions noted earlier, in the sphere of petty retail trade, and for a limited time.

On the other hand, it must have become obvious to anyone bearing in mind the rôle of money in the sphere of industry, described in an earlier chapter, that its use in Soviet economy opens a wide range of opportunities to stimulate managerial initiative, individual interest in economic improvements, and therefore occasions for Socialist emulation. It is this that Soviet writers have in mind when they declare that money in the U.S.S.R. is not *merely* a means of accounting, now that it has ceased to be capital, but that it is itself a potent economic factor.

This appears particularly when due regard is paid to the rôle of the State Bank in Soviet economy.

Even on the eve of the 1917 Revolution, Lenin was laying particular stress on this aspect of Socialist society—and not only of Socialist society fully developed, but of nationalised banking as a means of rescuing Russia from the disasters which threatened her at the time. In his booklet *The Threatening Catastrophe and How to Fight It*, he said that the nationalisation of the banks and their uniting into one would not in itself make the slightest alteration in property relations, and would not take a farthing from any property-owner. But it would make *possible* proper control: ¹

"Only when the banks are nationalised is it possible to reach a stage when the State knows whither and how, from where and at what time, millions and billions are flowing. And only control over the banks, over the centre, backbone and main mechanism of capitalist circulation, would allow not in words but in deeds the organisation of control over all economic life, over the production and distribution of the most essential products, the organisation of that 'regulation of economic life' which otherwise is inevitably

¹ *Collected Works* (English edition), vol. XXI, Book i, p. 186.

doomed to remain a ministerial phrase to fool the plain people."

It will be noticed that Lenin said all this was possible, even without depriving capitalists of their property. But shortly afterwards, in his work on the prospects of a successful Socialist revolution, entitled *Will the Bolsheviks Retain Power?*, he positively asserted the essential need for a State Bank in connection with the distribution as well as the manufacture of the products of a Socialist society:

"Capitalism has created an apparatus of registration and account, in the shape of the banks, syndicates, the postal service, consumers' societies, and unions of employees. Without big banks Socialism would be impossible of realisation.

"The big banks are the 'State apparatus' we need for the realisation of Socialism, and which we shall take from capitalism ready-made. Our problem here is only to lop away that which capitalistically disfigures this otherwise excellent apparatus, and to make it still bigger, still more democratic, still more comprehensive. Quantity is transformed into quality. A single huge State Bank, largest among the largest, with branches in every rural district and in every factory—that will already be nine-tenths of a Socialist apparatus. That will be general State book-keeping, general State accounting of the production and distribution of goods: so to speak, something in the nature of the skeleton of a Socialist society."¹

In the memorable address to the All-Russian Central Executive Committee of Soviets on 29th April, 1918, in which, as was shown earlier, Lenin sketched out the immediate methods for beginning the construction of that Socialist society—the Bolsheviks had now been in power

¹ *Selected Works* (English edition), vol. VI, p. 266.

for six months—he returned to this theme, declaring that it was necessary to proceed unfalteringly to "transforming the banks into the key points of public accounting under Socialism".¹

It is, in fact, on these lines that the State Bank developed when the Soviet Government could resume its constructive work at the end of the Civil War. The State Bank in the U.S.S.R. today is the heart of the Soviet financial system, the main purpose of which is to act as a regulator of "State book-keeping". Not only does it issue notes for the State and act as cashier for the long-term credit banks which provide the capital resources for expanding industry, trade and agriculture: it collects the taxes for the State, particularly the turnover tax, from public enterprise of every kind, and it grants short-term credits to that enterprise for its current needs. In the course of both these latter activities, as we saw in Chapter II, it acts as a powerful means of "rouble control".

On 1st January, 1939, 35% of the credits issued by the State Bank were for retail trade and for the wholesale purchasing of agricultural produce, while 65% were credits for industry, of a short-term character, and for the wholesale trade done by industry. The building-up of seasonal stocks of raw material, fuel, semi-finished goods, and advances to factories against documents showing that goods are in transit to their purchaser are the main purposes of such credits. Thus their effect is to stimulate the more rapid movement of goods; and this aspect is underlined by the regulation that trade over and above the amount planned is credited 100%. This places at the disposal of an enterprising factory or a trading organisation larger resources, in the shape of working funds, wherewith further to extend its activity.

¹ *Selected Works* (English edition), vol. VII, p. 326.

The principle that a percentage of net profits is retained within the enterprise, for collective or individual encouragement of its workers, applies to the trading organisations as well.

The organisation of this new kind of internal trade did not come easily by any means. Communism and trade seemed "something very unconnected, incongruous, remote" to many Communists in 1921, when Lenin first raised the issue in all its amplitude.¹

"When we say, for example, that the task that confronts us is to make the State a wholesale merchant, or that it must learn to carry on wholesale trade, that our task is commercial, some people think it is very queer and even very terrible. They seem to say: 'If Communists go to the length of saying that the task that comes to the forefront now is that of trading—ordinary, plain, vulgar, paltry trading—what can remain of Communism? Is this not enough to drive anyone into despondency and make him say that all is lost?'"

It required a considerable political campaign inside the Communist Party before this resistance, to which Lenin alluded, was overcome; and then years of experience were needed before the Soviet trading system came into even its present shape. The experience was acquired during years of direct competition with private capital, in which the rôle of the latter (in retail trade) was only gradually decreased from over 75% in 1922, at the beginning of the New Economic Policy, to 22% in 1928, on the eve of the first Five Year Plan.² This process of squeezing-out took primarily an economic form, by manœuvring with State reserves of manufactured goods,

¹ *Selected Works* (English edition), vol. IX, p. 290.

² Baykov, *op. cit.*, p. 65.

raw materials and foodstuffs, in the manner already described. Not until the State was strong enough to undertake direct substitution of its own supplies for those of the private trader—in the course of the first Five Year Plan—was the final blow given, by a series of restrictions which, in the course of 1931, put him out of existence.¹

When trading on individual account reappeared, in the period of the second Five Year Plan, it was of a very different nature. It took the form of the private disposal of his surplus produce by the collective farmer, through his own specialised markets. Thus it was not in essential contradiction to Socialist trading, but rather was an auxiliary means of encouraging socially-owned enterprise.

2. WHOLESALE, RETAIL AND PRICES ORGANISATION

The particular shape which wholesale trade has taken in this system is calculated to provide the utmost incentive to individual effort in the framework of public ownership. Raw materials (cotton, wool, furs, flax, hemp, etc.) and foodstuffs are bought from the State farms, collective farms and individual peasants that produce them by organisations controlled by the Ministry of Supplies, or by those of the *Centrosoyuz* (Co-operative Wholesale Society) and sold by them direct to the factories. In 1940 the co-operative organisations purchased 74% of the agricultural produce thus marketed. Semi-finished goods needed by industry, such as fuel, timber, ores, metals, and also equipment which the State factories require, are acquired from the enterprises producing them, or from

¹ *Summary of the Fulfilment of the First Five Year Plan*, p. 207.

the trusts in which they are grouped, by special supply organisations ("snabs") of the Ministry concerned (Ferrous or Non-Ferrous Metallurgy, Coal Industry of the East or West, Oil Industry of the East or South and West, Engineering—according to the speciality), or are sold direct to the factories requiring them. Finally, the finished goods are disposed of (when it is a case of directly serving the consumer), either through the Ministry for Trade, the regional or district agencies of which are at the same time the trading departments of the appropriate local authority, or through the *Centrosoyuz*. For relations between the producing factories or trusts and this sales machinery, the industries concerned have marketing agencies—"sbyts"—specialising in paper, textiles, light industries, metal goods, etc. In many cases these marketing agencies also buy raw materials, equipment, etc., for their industries.

This system cannot claim to be perfect yet, but it has provided to an increasing degree the necessary combination of flexibility, specialised functions at each stage, and opportunity of control through production and turnover plans; with simultaneous supervision through the banks. How this is ensured at the raw materials stage has already been shown. In the stage of production of semi-finished or finished goods the principle of trade is applied between the factory or other producing unit and the wholesale organisation (or between the wholesale organisations themselves) through the medium of contracts. The contracts deal with every aspect of the commodities to be supplied—quantity, quality, variety, technical standards, etc.—and likewise prices, dates of delivery, methods of payment, and fines or other penalties for inadequate fulfilment of the contract.

This kind of contract, based upon the plan for the

particular industry and the branch of trade with which it is connected, represents, as a recent writer has pointed out, the detailed application of the plan for the industry, in so far as a particular factory or economic organisation is concerned.

"The contract checks up on the fulfilment of the plan since, being concluded on the basis of the plan, it thereby interests the purchaser in fulfilment by the supplier. The checking of fulfilment of the plan takes place, in this way, not only from above, by centralised procedure, but also from below, daily, in the process of operational marketing and supply."¹

He quotes examples of the direct financial consequences of such a system, with its penalties for failure to observe agreed quantities, qualities, varieties, delivery dates, etc. During eleven months of 1940 the Coal Marketing Organisation (*Glavuglesbyt*) paid its customers 78.5 million roubles as penalty for low quality of output (particularly excessive ash content). At a session of the Supreme Soviet of the U.S.S.R. in January, 1944, the chairman of the Budget Commission of the Soviet of Nationalities reported that Ministries dealing with economic affairs of various kinds had in 1942 paid 274 million roubles, and in nine months of 1943 a total of 272 million roubles, for demurrage of railway trucks.

In order to reduce to a minimum delays in supplying the retail shops and stores, the main marketing organisations of the various industries maintain regional "bases" for wholesale distribution purposes, which they keep constantly replenished with the goods which experience has shown to be necessary to satisfy the local markets, or for which the regional plans provide reasonable

¹ Kozlov, *Khoziaistvenny Raschet v Sotsialisticheskoy Obschestve* (1945), pp. 70-1.

anticipation of demand. Some of these bases are specialised, such as those of the textile industry or leather industry: others work jointly—for example, the sugar and confectionery industries, or the organisations disposing of raw cotton, flax, wool, etc., to the appropriate factories. The numbers of these wholesale bases increased from just over 700 at the end of 1933 to nearly 2000 at the end of 1938.¹

Retail trade was organised before the war differently for town and country. In the towns there were State-owned shops, belonging to the trading departments of the People's Commissariat for Home Trade or to its central grocery, cooked foods and other departments (in some large towns), and municipally-owned shops as well. On their outskirts were held the "collective farm markets" where the collective farms or their individual members disposed of their surplus produce at uncontrolled prices. In the countryside retail trade was in the hands of village shops, entirely controlled since 1938 by Centrosoyuz. The growth of retail trade on this basis mainly of public ownership was as follows: ²

Year.	State and co-operative.	Collective farm markets.
1932	40.3 milliard roubles	7.5 milliard roubles
1933	49.8 " "	11.5 " "
1934	61.8 " "	14.0 " "
1935	81.7 " "	14.5 " "
1936	106.8 " "	15.6 " "
1937	125.9 " "	17.8 " "
1938	138.6 " "	24.4 " "
1939	163.5 " "	30.0 " "
1940	173.9 " "	41.1 " "

¹ Stalin, *Leninism* (1944), p. 640.

² Figures for 1932 in Batov, *Co-operatives in the Soviet Union* (1945), p. 10; for 1933-38, in Stalin, *Leninism* (1944), p. 640; for 1939, in Baykov, *op. cit.*, p. 254; for 1940, in the special volume "U.S.S.R." (1948) of the *Large Soviet Encyclopaedia*, pp. 1023-4.

During this period the costs of distribution, taking wholesale and retail trade together, fell substantially—from 12.53% in 1932 to 11.26% in 1937. At the beginning of the third Five Year Plan overhead costs in Soviet trade represented under 10% of the total turnover. Co-operative trade (30% of socially-owned trade in 1939) reduced its overhead costs from 10.2% of turnover in 1939 to 7% in 1943.¹

Obviously this system, worked out over a period of years, necessitates constantly grappling with problems such as the best method of organisation, the training of personnel, efficiency of distribution, adequate conditions of storage, and so forth. In his speech at the XVIII Congress of the C.P.S.U. (13th March, 1939) the People's Commissar for Trade, Mikoyan, declared that "there is a gap between the rate of growth of demand and the rates of development of trade". While the requirements of the consumer were growing, the Soviet trading system was still very short of trained staff, and there was much spoilage owing to inadequate numbers of warehouses and shops, or to their inadequate equipment. In passing, it may be noticed that the numbers of shops and trading-booths had reached nearly 357,000 at the end of 1938. Mikoyan also mentioned that the organisations of the People's Commissariat for Trade and the Centrosoyuz both showed a marked preference for trading in the central regions rather than in those of the more remote Republics, to save themselves trouble. Yet, he said, there were quite important things to be bought there, such as grain and industrial raw materials, and the people who produced these required just as much service as those in the centres.²

¹ Kozlov, *op. cit.*, p. 74; Batov, *op. cit.*, pp. 28, 61.

² *Land of Socialism Today and Tomorrow* (Moscow, 1939), pp. 371-2, 377.

In 1940 the same Government department complained that "trade organisations are still paying insufficient attention to the quality of goods, they continue to accept from industry and co-operative handicraft organisations goods of bad quality and below standard, and continue to sell foodstuffs made from low-grade produce".¹ The same year the text-book of Soviet economic history published by the Institute of Economics declared: "Trade in the U.S.S.R. is still a branch of national economy that lags behind, in spite of the rapid growth in the trade turnover of the country."²

Control on the spot through the State Bank has played an important part in improving the working of the State trading network, in addition to supervision from above. By "rouble control", fulfilment of the plan of commodity circulation is stimulated, reduction of overhead costs promoted and the efficiency of the trading organisations encouraged. As a condition of granting the short-term credits mentioned previously, the branches of the State Bank require from the State trading and co-operative organisations their monthly plans of cash income and expenditure, and evidence that they are in fact spending their working resources on wages, hiring of premises, packing, transport, etc., within the limits laid down by the plan, apart from seasonal variations.

Considerable emphasis is laid by Soviet economic writers on the rôle of short-term credits in Soviet economy.³ Soviet trade, as we have seen, is different in its purposes and nature from trade in other countries, and the trading profit created in the process is therefore also different in nature from trading profit in a capitalist system. It is

¹ Quoted by Baykov, *op. cit.*, p. 255.

² Arutinian and Markus, *op. cit.*, p. 538.

³ See, for example, the article on short-term credit in Soviet economy by M. Usoskin, *Planovoye Khoziaistvo* (1947), No. 3.

that part of the surplus product of Socialist economy, expressed in cash form, which is realised only in the process of commodity circulation, from producer to consumer. But although expressed in cash terms, both trading profit and the transactions in which it arises do not necessarily involve the use of cash. It is of interest to the State that currency issues should be used as far as possible for their direct purpose of permitting the individual citizen to receive his precise share of the social product; and that all other transactions, before and after the direct dealings of the individual consumer, should be on a book-keeping, non-cash basis. Short-term bank credits promote this aim also, since they make it possible for the trading organisations to bridge the gaps that constantly occur between despatch of goods and receipt of payment—just as in a capitalist economy, of course, though with a different social purpose. Moreover, the system under which the State Bank must refuse credit if the trading organisation allows unnecessary accumulation of goods also helps to speed up turnover, and thereby assist in the fulfilment of the general economic plan of the community.

Until the eve of the war, the short-term credits granted by the State Bank to industry affected the heavy industries to a very small extent. Less than 14% of the total under this head had been granted to these industries. It was precisely in order to reduce to a minimum (i) the reserves of unfinished and semi-finished goods held by the heavy industries, and still more (ii) their reserves of completed goods, that an important decision was made in 1939 to introduce bank credits to replace part of the sums which they retained until then as "working funds", out of their gross yearly takings. Since that year engineering plants, for example, have 20% of their working funds provided out of bank credit instead of from their own resources

(i.e., out of deductions from their takings), in respect of reserves of the first category, and 50% of their working funds covered in the same way in respect of reserves of finished goods. The effect of this measure has been to speed up their trading relations with the organisations to which they dispose of the equipment they have manufactured, and to increase supervision by the State Bank as in other industries.¹

The price system in the U.S.S.R. is also an important means of promoting both fulfilment of plans and economy and efficiency in distribution and production. Prices are carefully calculated, so as to cover the costs of production and distribution of each main product, the amount taken by the State for redistribution in other productive fields (the turnover tax), and the planned profit required to expand production or distribution in the particular branch of economy concerned, and to stimulate individual effort. Thus prices in Soviet economy are not merely a means of accounting or book-keeping, but an important economic instrument.

Profits, for example, are determined according to the needs of economy as a whole, and therefore a trading organisation is not allowed to concentrate only on those branches of trade which will bring in most profit. In the speech of Mikoyan already quoted cases were mentioned where, owing to wrongly adjusted wholesale prices, the managements of trading organisations had secured excessive profits from the sale of some grade of commodity, and suffered heavy loss from the sale of other goods. This had led to disproportionate concentration on the sales of the most profitable goods, to the injury of economy as a whole, which required both types. The Government had had to intervene and correct the wholesale prices concerned.

¹ Rovinsky, *Gosudarstvenny Biudzhets SSSR* (1944), p. 68.

Again, in fixing prices the State aims at promoting economies or developing particular branches of production. Thus, until the prices for copper were raised, factories using it would not replace it by available substitutes.¹ On the eve of the war it was noted that regional trading organisations did not take full advantage of local fuels, raw materials, etc., to stimulate local production to the advantage both of the consumer on the spot and the national economy as a whole. The fixing of single maximum prices for a large variety of foodstuffs and manufactured goods, applicable throughout the country, and the relieving of purely local manufacture of the burden of turnover tax, both had the effect of stimulating such local development of resources.²

The redistribution of the national income by means of prices—fixing lower prices for the output of heavy industry than costs would warrant, and higher prices for the output of light industry—has played a most important part in the development of Soviet planned economy, since resources from outside, such as loans and credits, were not forthcoming (as they had been when American industry was developing in the nineteenth century, or Japanese industry was developing in the twentieth century). The burden of capital expenditure falling upon those industries which were using the output of the heavy industries was correspondingly lightened.

In fixing prices the State to some extent takes into account demand and supply, although not necessarily raising prices when demand increases (often the reverse), but rather taking steps to increase supply.

In some cases the State, when fixing prices of staple foodstuffs, has had in mind the prices existing in the

¹ Kozlov, *op. cit.*, pp. 65–6.

² *Dohody Gosudarstvennogo Biudzheta SSSR* (1945), p. 31.

collective farm markets—on which it was able in this way to exercise an indirect economic influence, while renouncing, as we have seen, any direct or administrative influence.

3. POST-WAR PROBLEMS

The problems arising from the war considerably complicated the task of managing Soviet trade. Quite apart from the proper reconversion of the wholesale trade—which necessarily in Soviet conditions is determined by the structure and working of the production machinery—the question of retail trade was of particular importance in post-war conditions, reflecting, more directly than could wholesale trade, the standard of living of the individual citizen.

Sufficient has been said in the first chapter to show that the gigantic devastation wrought by the Germans was bound severely to affect living conditions, which had been improving so unmistakably in the last years before the war. It is possible to construct a comparative table of output levels provided for under the third and fourth Five Year Plans respectively, in this field also, just as earlier in the field of capital goods. The table will be another illustration of the great setback inflicted by the Nazi invasion: ¹

	Output 1937.	Planned for:	
		1942.	1950.
Cotton fabrics (million metres)	3442.4	4900	4786
Woollen fabrics (million metres)	105.1	177	168
Leather footwear (million pairs)	164.2	258	159.4
Sugar (thousands of tons)	2421	3500	2400
Paper (thousands of tons)	831.6	1500	1340

¹ Figures in the first two columns are taken from Molotov's speech at, and the final resolution of, the XVIII Party Congress in 1939. Figures in the last column are given in *Law on the Five Year Plan*, pp. 13-14, supplemented by the Council of Ministers on 23rd December, 1946, except those relating to paper, given by Voznesensky, *Report*, etc., p. 13.

The return of 1950 targets to the level of those planned for 1942, and in some cases to a point below them, in spite of the great recuperative powers of Soviet economy, is a statistical reminder of the thousands of collective and State farms deliberately burned to the ground by the Germans, of hundreds of thousands of people massacred and fields allowed to go to waste, of thousands of factories which manufactured consumer goods blown up or stripped of their equipment.

Yet it was not only in the field of production directly affected by the Germans' depredations that the war brought its problems. The retail distribution machinery suffered such damage that its rebuilding became one of the most urgent necessities for further effective planning. This in its turn made necessary a great expansion of the co-operative trade machinery, particularly in the towns, whence it had been excluded in 1935. It is interesting to note that, according to an authoritative British co-operative delegation in 1944, the need for this was already making itself felt before the war was over: ¹

"The Delegation inquired of several persons whether they felt that there was a possibility of the State in the future developing its trading in the rural areas, as it had done in the towns. The view invariably expressed was that there was much more likely to be a development of co-operative organisation in the towns than a development of State trading in the rural areas."

What were the conditions that prompted this change, actually introduced by a decree of the Council of Ministers of the U.S.S.R. on 9th November, 1946?

The consumer co-operatives in the countryside, under

¹ *Soviet Co-operation: Official Report of the British Co-operative Delegation to the U.S.S.R., 1944* (Co-operative Union, 1945), p. 21.

war conditions, had ceased trading in the fullest sense—*i.e.*, they did not attempt to purchase the surplus of agricultural produce and raw materials remaining in the countryside after the collective farms had completed their deliveries and contract sales, either for reselling to the townsfolk or, on a large enough scale, to use the raw materials for production of consumer goods. That this extension of co-operative trade was possible had been proved during the war by those consumers' societies which did make the attempt to use local material, and to enlist the services of collective farmers in their spare time, for the manufacture of such goods as sheepskin coats, hosiery, felt boots, leather shoes, simple furniture, household necessities, clothing and haberdashery, jams and preserves, and so forth. At the end of 1944 there were more than 10,000 such enterprises, their aggregate output rising by nearly 200% between 1942 and 1943, and by another 50% at least the following year.¹ But the full opportunities for such trade were far from utilised.

Again, the consumer co-operatives during the war confined their trade in the main to goods in short supply received from the State, while the co-operatives of handicraft producers did not in the main sell their own production themselves, but disposed of it to the State—all the more because they concentrated on production of such things as machine-gun parts and anti-tank equipment, rather than kitchen utensils and household requirements. As a consequence, both forms of co-operative organisation tended to lose contact with the direct consumer, and therefore to fail to respond to his requirements. In its turn, this failing meant that the co-operatives ceased to compete adequately with State trade.

There was evidence of this stagnant condition of co-

¹ Batov, *op. cit.*, p. 60.

operative trading long before the decree mentioned above. Thus, a report on the co-operatives of the Kalinin region in September showed that their plan of turnover for the first half of 1946 had not been completed, that goods for mass consumption represented only 8% of the total turnover, that not a single district office for purchasing produce was carrying out its plan, that the trading network—*i.e.*, the co-operative shops—was most inadequate, etc.¹

The Disabled Persons' Co-operative Union, which had done 1½ milliard roubles' worth of retail trade in 1940, had completely stopped its work in the Moscow and Leningrad regions during the war years, and considerably reduced it in others. Its food factories (sausage, smoked fish, starch, confectionery and other factories) had in recent years confined themselves only to working up material and produce supplied by the State. Twenty-three small leather factories which it owned were not working full time because of the lack of raw material, for which they were again relying upon the State. Its total turnover during most of 1946 was only a third of the pre-war figure.²

Or again, the Leningrad City Soviet, on 26th November, 1946, heard a report showing that the share of co-operative organisations in commodity turnover within the city was 3.8% in 1940 and only 0.6% in 1946. Absence of healthy competition between trading organisations was leading to an absolute diminution of trade. Thus in 1940 the local trading organisations had brought into the city mass consumption goods, over and above those supplied from State sources, to a value exceeding 300 million roubles, while in ten months of 1946 only 19 million roubles' worth had been thus brought in. A great deal of waste or spare material of the 400 more or less important

¹ *Pravda*, 15th September, 1946. ² *Ibid.*, 15th November, 1946.

works of the city was not being used for production of mass-consumption goods, and the co-operative producers' organisations were losing opportunities of manufacturing such simple requirements as children's clothes, ties, toothbrushes, shaving-brushes, needles, tape-measures and scissors.¹

Some of the difficulties were due to unavoidable consequences of the war. Thus, in Belorussia most of the shops and stores belonging to the co-operatives were wrecked or burned by the Germans. In the Tambov region the shareholders in war-time had ceased to be active in the management of their societies, owing to the stopping of dividends. In Ukraine the village co-operatives were weakened by the method of appointment of their managements, in place of election, during the first months after liberation;² and in Leningrad, too, the activity of the nearly 43,000 members of producers' co-operatives was held back by the violations of democracy in the management of their affairs—a complaint which was also made in the Kalinin report quoted earlier.

Debates at Budget sessions of the Supreme Soviet of the U.S.S.R. revealed much evidence that the war had brought serious deterioration in wholesale trade as well. Up to October, 1946, said the chairman of the Budget Commission of the Soviet of the Union at its meeting that month, the Ministry of Supplies had not considered the 1945 reports of two of its largest organisations—that for purchasing raw materials from livestock breeders and that for purchasing meals of different kinds. Organisations of the Ministry of Trade were equally slack: the Moscow Restaurant Trust did not examine a single report from its thirty-two business units during the first quarter of 1946.³

¹ *Pravda*, 28th November, 1946. ² *Ibid.*, 22nd November, 1946.

³ *Ibid.*, 17th October, 1946.

Deputy Deglavs (Latvia) complained¹ that in Riga there were a number of unnecessary offices of inter-Republic marketing organisations, which had grown up or had excessively enlarged the numbers of their staffs in the war years. Thus, the office of the Chief Paper Marketing Organisation was doing work—distribution of manufactured paper—which in 1941 had been adequately dealt with by the local paper industry itself and by one economist, working in the State Planning Commission of the Latvian Republic. He also gave the example of the factories belonging to the light, textile and rubber industries of Latvia, with 9000 workmen in all, which were controlled by a single Ministry of Light Industry—yet the sale of their products was in the hands of three all-Union (*i.e.*, centralised) marketing organisations—those handling textiles, rubber goods and light industry goods respectively. In his reply to the discussion, on 18th October, the Minister for Finance admitted the justice of Deglavs' complaint, saying it was "indubitable that the staffs of the supply and disposal organisations must be reviewed and radically reduced, which will help to improve their work and allow the State to economise considerable resources". At the Soviet of Nationalities in February, 1947, Deputy Abdurahmanov (Uzbekistan) made a similar complaint, saying that at Tashkent there were forty-nine branch offices of all-Union marketing organisations, with a staff of 1100, which could be closed down with advantage.²

In the light of these and similar difficulties, the tasks put before the country by the fourth Five Year Plan were formidable. The volume of State and co-operative retail trade was to increase by 1950, allowing for price

¹ *Pravda*, 18th and 19th October, 1946.

² *Izvestia*, 23rd February, 1947.

differences, to a figure 28% above that for 1940. This meant an increase of foodstuffs marketed by 23%, and of manufactured goods marketed by 36%, as compared with 1940. Moreover, there was to be a big increase in sales, not only of essential goods of a consumption character, but also of such amenities as radio sets (from 207,000 to 925,000), bicycles (from 228,000 to 1,500,000) and clocks and watches (from 2,581,000 to 7,400,000).¹ The plan also laid down:

"The network of State and co-operative shops in town and country, as well as of wholesale stores and warehouses, shall be restored and extended. The network of specialised stores in the towns, and of district department stores and of those for the sale of peasants' requisites, shall be restored and expanded. . . .

"The further expansion of collective farm trade shall be promoted, the collective farm markets shall be restored and their number increased, and an extensive sale organised of manufactured goods in demand by the farming population."

Local industry and industrial co-operatives, the plan provided elsewhere, were to increase the output of furniture by 30%, knitted goods by 25-30%, bricks 110%, etc., as compared with the pre-war figure. "The extension of Soviet trade, as a result of the abolition of the rationing system and a steady reduction in prices, will substantially enhance the value of the Soviet rouble in the entire economic life of the country," added Voznesensky, chairman of the State Planning Commission, when reporting to the Supreme Soviet on the fourth Five Year Plan.

The first year's work under the new Plan, in fact,

¹ Speech of Lyubimov, Minister of Trade, at the Supreme Soviet, 18th March, 1946 (*Pervaya Sessia*, etc., p. 239).

showed some appreciable results. Output of cotton goods increased in 1946 by 17%, of leather footwear by 28%, of woollen fabrics by 30% and of stockings and socks by 48%, compared with 1945. Retail trade turnover exceeded that of 1945 by 30%, which included a 15% increase in sales of foodstuffs and an 85% increase in sales of industrial goods. Nevertheless, the Council of Ministers decided that "the restoration of the production of consumer goods has considerably lagged behind the restoration of the output of means of production", and that therefore in 1947 it was necessary to increase the development of industries producing consumer goods by at least 27% as compared with 1946, to take further measures to develop the trade turnover and in particular to develop co-operative trade on a large scale. The number of shops and stalls was to reach 150,000 in the towns and 198,000 in the villages—nearly the pre-war figure.¹

The first reports of the application of the decree relating to the extension of co-operative trade to the towns showed both the possibilities in this sphere and the great opportunities for individual initiative which they throw open. The Government gave direct encouragement to the producers' co-operatives, for example by transferring to them part of the machinery, equipment and raw material not utilised by State industry, by freeing them from orders placed by State industries, and by laying down that members of these co-operatives would be relieved of certain taxes, and might receive up to 20% of net profits as additional earnings, by way of distribution among the members.

The beginning of co-operative trade in the towns of Vladimir region made it possible to supply fresh and cooked meats in co-operative shops at prices lower than

¹ *Pravda*, 1st March, 1947.

those prevailing in the State "commercial" (off-ration) stores and in collective farm markets.¹ On 21st November, 1946, the chairman of the Moscow Regional Union of Consumers' Societies estimated that by the end of the year thirty shops and stalls would be opened in the towns of the region: but in fact, by 15th December about 100 had been opened.² Within two months after the decree 4400 shops and stalls were opened in towns and workers' settlements throughout the U.S.S.R. by the co-operative movement:³ and another 15,500 during the first quarter of 1947, while their retail trade turnover in March, 1947, was already three times what it had been in December, 1946. The turnover of the Moscow co-operative stores was constantly increasing, reported the *News Chronicle* Moscow correspondent on 17th January, 1947, adding: "Main reasons for the popularity of co-operative stores are (i) that their prices are 12 to 20% lower than those of commercial shops, and (ii) that they sell a greater variety of goods". The industrial co-operatives of the Russian Federation—11,000 societies with 35,000 workshops, in which nearly a million members were engaged—had planned to increase the numbers of their shops and stalls to 2500 by the end of 1947: but by February the number was already 3000.⁴

In December, 1947, the decree abolishing rationing and decreasing prices (while raising the purchasing power of the rouble through a currency reform) marked the opening of a new stage in the history of Soviet trade—and not merely the return to pre-war conditions. The ground had been thoroughly prepared. Clothing output had doubled in the course of the year, that of footwear had

gone up by 44%, of cottons 37%, of woollens 36%. The better harvest had provided bread, flour, sugar and other prime necessities in abundant supply; 100,000 new shops had been opened in eighteen months, over a quarter of them by the co-operatives in the towns—where their retail turnover, thanks to lower prices, had gone up in one year to 24% of that of the State "commercial" shops. These were abolished by the law that did away with rationing, and the prices for the textiles, footwear, clothing, household goods of all kinds which they sold reduced by 60–70%. The importance of this measure can be judged from the fact that in December, 1947, over 40% of all goods sold in towns had come from the State "commercial" stores. Their high prices for most foodstuffs were brought down to the level of the "rationed" prices (for bread and cereals, even lower). Only collective farm markets and co-operative shops were left free to fix their own prices by judging demand and supply, as before: but this was enough to secure very big price reductions here, too.

All the population suffered some loss, naturally, by the conversion of old currency into new where bank deposits and cash in hand were concerned: but even here special provision was made to affect the savings of the overwhelming mass of the people, and the funds of the working class organisations and collective farms, as little as possible (by revaluing *bank deposits* up to 3000 roubles at face value, and those above this amount at slightly less favourable rates—but at five or six times better rates than for cash in hand, the form preferred by the post-war petty trading speculator; and by revaluing *current accounts* of co-operatives and collective farms at the still more favourable rate of four new for five old roubles). Within a very few weeks the transitory effects of this revaluation were

¹ *Pravda*, 23rd November, 1946.

² *Soviet Monitor*, 17th December, 1946.

³ *Ibid.*, 1st February, 1947.

⁴ *Soviet News*, 21st March, 1947.

ceasing to be felt, and the permanent effects of the return to normal Soviet trade were more and more evident, in the shape of a substantial increase in the volume and variety of retail trade.

Problems of more efficient trade brought with them the problem of training personnel capable of taking advantage of the new opportunities. "The success of co-operative trade, as of everything else, is decided by human beings," the chairman of the Centrosoyuz, I. S. Khokhlov, had said in a *Pravda* interview on 13th November, 1946. "Nearly 850,000 people are working in our system. Many of them have not as yet the necessary experience and skill in trading work. We have to help these people to grow, to teach them, to pass on to them the experience of the best experts working in the co-operative movement." This point was taken up by the chairman of the Co-operative Workers' Union, Tayursky, in a speech at a conference on co-operative trading problems on 22nd November, 1946.¹ "It would be useful to publish on a mass scale instructions in the technique of preserving and selling foodstuffs," he said, referring to the great army of newcomers into co-operative trade. "Stakhanov schools should be set up in the best shops, and a network of seminars ought to be organised to raise the skill of shop workers. It is essential seriously to take up the political education of the people who give daily service to the citizens of the U.S.S.R." Socialist emulation in the consumers' co-operative movement should be given a new impetus, so as to fulfil the Government's decision as rapidly and as effectively as possible.

In fact, Socialist emulation is as applicable to the technique of Soviet trade as it is to that of production. Before the war it had begun to play an appreciable part

¹ *Pravda*, 23rd November, 1946.

in improving the quality of service to the consumer and in lowering overhead charges. It led to an increase in turnover per employee of the State shops from 121,600 roubles in 1936 to 129,400 roubles in 1937. As a result of emulation between trading organisations of the four largest cities of the U.S.S.R. in 1936, the number of large stores delivering purchases rose from 175 to 407, and of those with single-price departments for the housewife from 204 to 392. Many rationalisation proposals were being adopted.¹

In the ingenuity with which peasant requirements are met by stocking the village with commodities most in demand: in the most economical management of such shops, so as to leave greater resources available for purchase of raw materials and foodstuffs, while at the same time exceeding planned profit and thus increasing the earnings of the shop staff: in maximum care of produce while in transit or storage, so as to reduce waste below planned figures and thus again increase working profit: in the most efficient management of the small workshops and factories owned by the producers' and consumers' co-operative societies: in organising sales and service to the customer in the town shops, so as to assure a quicker turnover of goods than was the habit during the years of war shortages and rationed supply: in the struggle for cleanliness and politeness in retail stores—in all these and other spheres, Socialist emulation found in 1947 a wide field of application once again. At the same time, the campaign for corresponding reduction of costs and wastage, and for increased efficiency, in the large State organisations responsible for the regulation of wholesale trade, also called forth new forms of Socialist emulation.

¹ Arutinian and Markus, *op. cit.*, p. 538.

Thus, *Izvestia* on 5th April, 1947, published the pledge of workers in the Kharkov regional office of the Torgbank—the bank dealing with long-term credits for capital construction in home trade. They undertook to complete their year's plan of "mobilisation of resources" by 7th November, 1947, and to over-fulfil it to the extent of 3 million roubles by the end of the year; to institute strict registration of the "limits" allowed under the State capital expenditure plan for particular construction jobs, and to assure quarterly progress reviews of building jobs authorised for 1947; to inspect all existing agreements involving capital expenditure, whether the jobs concerned were in the installation, construction or survey stage; and to make a careful study of the financial and economic state of the producers' co-operatives (artels) of the region. It was a programme of Socialist emulation in "rouble control".

It is evident, however, that the judgment passed on Soviet trade in 1940—that it "is still the branch of national economy that lags behind"—holds good as yet in regard to Socialist emulation. In the two-day discussion on the executive committee's report at the Congress of the State Trading Workers' Union, held in October, 1947, "many delegates spoke of the unsatisfactory guidance of Socialist emulation. Positive experience is not studied and made widely known. The union organisation makes a poor show in its fight against defects in the work of shops and canteens, against queues, against errors in bills, theft and embezzlement. The State Trade Inspectorate sometimes overlooks big defects and fails to make use of the public controllers" (*Trud*, 3rd October, 1947).

This sharp criticism, published in the daily newspaper of the Soviet trade unions, is a salutary reminder both of the difficulties still met with in this sphere and of the well-tried method of overcoming them practised in the U.S.S.R.

CHAPTER VI

INDUSTRIALISATION IN CENTRAL ASIA

I. THE ECONOMIC PAST OF SOVIET ASIA

SEVERAL writers in recent years have described the remarkable changes brought to Central Asia by the Revolution.¹ Whether hostile or sympathetic, their descriptions of the economic and social transformation of this former colony of the Russian Empire give many details of a major Soviet achievement. It is not the aim of the pages which follow to repeat what these authors have written: it will be sufficient to show the main stages of economic evolution in Central Asia since 1917. The problems arising in the train of the fourth Five Year Plan can then be seen in their true perspective.

It would be in vain for anyone to search in the *Russian Year Book* for 1914—a bulky volume published in this country with the aid of the Russian Ministry of Finance—for even a mention of the Uzbeks, Tadjiks, Turkmens or Kazakhs—four out of the five peoples who have given their names to as many constituent Republics of the U.S.S.R. situated in Asia. They are all lumped together as "native tribes" (p. 62). And although they are mentioned by name in the eleventh (1910-11) edition of the *Encyclopædia Britannica*, it is only to draw attention to

¹ E. S. Bates, *Soviet Asia* (1942); Davies and Steiger, *Soviet Asia* (1943); Leonard Barnes' penetrating analysis, *Soviet Light on the Colonies* (1944); and two informative booklets by D. G. Wolton, *Peoples of the Soviet Union* (1944) and *Asia Reborn* (1945).

the relatively higher level of civilisation which they enjoyed in the Middle Ages, and to add the melancholy reflection that now "all is in decay", and that it was an open question "whether the Russians will be able to bring new vigour to the country and awaken intellectual life".¹

Agriculture consisted predominantly of cotton-growing. Central Asia supplied practically all Russian-grown cotton: but this was only 70% of the total consumption of Russia's cotton industry, and the remainder had to be imported.² Livestock breeding was practised by nomad tribes, and on a large scale. The output of cereals in Central Asia was less than 5% of the total output of the Empire.

Industry, apart from a few establishments, was confined to handicraft of a domestic character, such as had been practised in the Middle Ages. The coal output in 1911 represented about 0.4% of the total for the Empire, and oil slightly over 2%.³ The *Encyclopædia* said that "no manufacturing industry is carried on by means of machinery, except distilleries and establishments for dressing raw cotton", and that the vast coal beds were "not seriously worked" and the petroleum and graphite deposits "neglected" (p. 421). In the *Year Book's* account of Russia's electric power resources, and of her manufacture of iron and steel, cement, cotton goods, boots and shoes, Central Asia was not mentioned.

On the eve of the world war of 1914 the workers in Central Asian coal and copper mines, oil wells and salt works represented barely 1000 out of some 240,000 in the Russian Empire. They were not even included in the feeble "regional" scheme of State insurance for factory workers introduced in 1912.

Literacy in Central Asia amounted to 5.3% of the

¹ Vol. XXVII, p. 422. ² *Year Book*, p. 493. ³ *Ibid.*, p. 199.

population, or 6% excluding young children; but these figures, given by the *Russian Year Book* (pp. 95-6), included the Russian colonists. In the case of the native population the figures were much lower—from 2 to 3% among the Uzbeks, 2.3% among the Kazakhs, 2% among the Kirgiz, 1% among the Turkmens and 0.5% among the Tadjiks. In education "nearly everything has still to be done", was the dispirited comment of the *Encyclopædia Britannica*. The low level of education, in its turn, gave a pretext for the exclusion of the peoples of Central Asia from even the very limited Duma franchise and representation permitted by the constitutional laws of 3rd June, 1907.

The health statistics of the *Year Book* (p. 464) were also entirely "colonial" in the case of Central Asia: 7.3% of the people were suffering from syphilis (the highest figure for the Empire) in 1911 and 3.97% from other venereal diseases, 15% from scabies and 40% from malaria (again the highest in the Empire except for the Caucasus).

The *Encyclopædia Britannica* summed up the situation in respect of public services at that time as follows:

"The Russian rule has imposed many new taxes, in return for which Turkestan only gets troops of Russian merchants and officials, who only too often accept the worst features of the depraved Mussulman civilisation of the higher classes of the country. Schools are being built, but the wants of the natives are being subordinated to the supposed necessities of Russification" (p. 422).

It is indeed a startling experience to turn from this dismal picture to the aims for Central Asia laid down by the fourth Five Year Plan, and in particular to realise the very different place which the five Asiatic Republics are to occupy in Soviet economy by 1950—bearing in mind that their aggregate population is less than 9% of that of

the Union. The main indicators can be set out as follows:

	Five Asiatic Republics.	U.S.S.R. total.	Percentage of total falling on Asiatic Republics.
<i>Industrial output—</i>			
Coal (million tons)	19.6	250	7.8
Oil (million tons)	3.5	35.4	9.9
Electricity (million kw.h.)	4455	82,000	5.4
Cement (thousand tons)	325	10,500	3.1
Cotton fabrics (million metres)	220	4686	4.7
Footwear (million pairs)	16.7	240	7
Vegetable oil (thousand tons)	224.5	880	25.5
Sugar (thousand tons)	201	2400	8.4
<i>Agriculture—</i>			
Sown areas (million hectares)	13.1	158.6	8.3
Under grain (million hectares)	8.2	105.8	7.7
Under cotton (million hectares)	1.35	1.7	80.4
Meat (thousand tons)	152.3	1300	11.7
<i>Culture and Health—</i>			
Schoolchildren (millions)	2.997	31.8	9.4
Hospital beds (thousands)	86.1	985	8.7

It will be useful to read this table in the light of the figures available for the progress of literacy, up to the eve of the fourth Five Year Plan; because they give an indication of the period at which the biggest change in the Central Asiatic Republics began—and without that change the industrial targets for 1950 would not have been a practicable proposition. The figures in question are drawn from the census statistics of 1926 and 1939, for persons over nine years of age, published by *Izvestia* (29th April, 1940), and from information given by deputy Berdyev at the Soviet of Nationalities on 18th March, 1946 (for Turkmenistan), by the Soviet *Reference Calendar* for 1944 (Tadjikistan) and by *Pravda* on 1st June, 1946, 2nd November, 1946, and 3rd February, 1947 (for the Kazakh, Uzbek and Kirgiz Soviet Socialist Republics):

	1913.	1926.	1939.	1945.
Russia/U.S.S.R. (%)	21.1	51.1	81.2	—
Turkmenistan (%)	1	12.5	67.2	90
Uzbekistan (%)	2.3	10.6	67.8	Nearly 100
Tadjikistan (%)	0.5	3.7	71.7	75 (in 1943)
Kazakhstan (%)	2.3	22.8	76.3	Nearly 100
Kirgizia (%)	2	15.1	70	Nearly 100

The fact is that while the first ten years wrought substantial improvements, it was not until after 1926—*i.e.*, until the period of industrialisation on Socialist lines began—that a really rapid and decisive break with the past took place. The results secured in 1945, bringing Central Asia as a whole almost up to the level of the most literate parts of the country, reflect precisely those further economic developments which make the programme for 1950 realistic.

When we look at the aims for 1950 given earlier, perhaps the most striking feature, out of several, is the emergence of industry on a large scale, in proportions which are on the whole in keeping with the size of the population—whether we take production of capital goods, or of consumption goods, or the processing of agricultural produce. These figures mean that, while the special suitability of Central Asia for cotton-growing still dictates the main features of its agriculture, the economy of the region as a whole becomes more balanced. This, too, has its foundation in previous achievement, as the following table shows:

Gross Output of Industry (in million roubles at 1926-27 prices).¹

	1913.	1937.	1950.	Increase since 1913.
Uzbekistan	269	1668	2800	10 times
Kazakhstan	51	982	1300	26 "
Turkmenistan	30	293	490	16 "
Tadjikistan	1	187	450	450 "
Kirgizia	1	170	360	360 "

¹ The first two columns are quoted from Granovsky and Markus, *Ekonomika Sotzialisticheskoi Promyshlennosti* (1940), p. 297; the third is taken from *Law on the Five Year Plan*.

The real significance of these figures, in fact, is that the industrialisation of Central Asia, and with it the economic transformation of the whole region and the cultural revolution which accompanied the process, are the direct consequences of the system of Socialist planning.

As late as 1927-28, the eve of the first Five Year Plan, there were no regional power-stations in Central Asia, and the *Control Figures for 1928-29*, published by the State Planning Commission, declared that industry was "feebly" developed there, with its main branches connected with the processing of agricultural produce, such as cotton and silk. The relative importance of industry in the output of the region (about 40%) fell to 28% if the value of the main raw material—cotton—were deducted. Transport conditions were "most unfavourable". Vast districts, including those producing cotton, were poorly connected with the centre of the country, and experienced difficulty in moving their produce. Cultural conditions were described in the following words: ¹

"Being in the recent pre-revolutionary past Tsarist colonies and Eastern despotisms, the Central Asian Soviet Republics suffer from insufficient development of mass education and sanitary and hygienic conditions of life, and are distinguished by the extremely low level of general culture and particularly of municipal services."

The general condition of these Republics, in the opinion of the State Planning Commission, was (in spite of much social and cultural progress since 1917) "characterised by their untouched vast natural resources, a traditional age-old technique of agriculture and cattle-breeding, in conditions of complex irrigation economy of oasis type: by undeveloped factory industry and lack of experience of

¹ *Kontrolnye Tzify na 1928-29*, pp. 536, 616, 617.

the local population in factory and large-scale industrial labour: by traditional forms of domestic, artisan and handicraft industry, based on primitive and empirical craft technique: by the disconnected and isolated life of the individual oases and districts owing to their historical past and natural conditions (broken relief, deserts and high plateaux): and by a general poverty of life, with survivals of national, tribal and religious prejudices".¹

In describing the individual republics, the State Planning Commission was equally plain. Kazakhstan, it declared the same year,² "is the type of a nationally backward, cattle-breeding and land-tilling region of the desert-drought zone, subjected in the past to a process of colonial enslavement". Its very considerable natural resources were "still awaiting their utilisation". Power-station capacity was only 4.1 thousand kilowatts. 1% of the households of farmers were collectivised. The total number of tractors on the land was no more than 773. The *Control Figures* for the following year added:

"In the social and cultural sense Kazakhstan is one of the most backward regions of the Soviet Union. The semi-nomadic life of the basic population, its insufficient density, the fewness of the towns and, lastly, Kazakhstan's position in the past as a colonial country, determine the conditions which prevail at present in this respect."

In fact, the number of children in elementary schools in 1928-9, although far higher than in 1913, was still only 269,000 in a population of some 5 millions, and the number of hospital beds, although again much greater than in 1913, was only 4400.³

¹ *Kontrolnye Tzify na 1928-29*, p. 618.

² *Pyatiletni Plan* (1929), vol. iii, pp. 262, 267, 269, 274.

³ *Kontrolnye Tzify na 1929-30* (1930), pp. 376-7.

Equally unmistakable was the verdict on the other republics. For Kirgizia, wrote the compilers of the first Five Year Plan, "the next five years will to a considerable degree give birth to industry and mark out its main lines—mineral fuel, sugar, cattle-breeding". As regards Tadjikistan, "the period 1928–33 must literally create everything from the beginning, starting from a few initial units".¹ No less clear is the picture of cultural conditions in Uzbekistan.

"The number of literates in the Uzbek S.S.R. is 98 per 1000, while on an average throughout the Union it is 513. One doctor in Uzbekistan serves 33,597 in the villages, while the average throughout the Union is one doctor for 16,917 persons. Of the Central Asian towns, only in two (Tashkent and Ashkhabad) are there simplified-type water supplies (dating 1908–10)—not covering, however, all the area of these towns. There is no sanitation system in any town; and only at Tashkent is there a tram service."²

2. AFTER THE FIVE YEAR PLANS

Great changes were brought in all these respects by the first Five Year Plan, and still more by the second. In agriculture the improvement was primarily qualitative, by the increase of yields. Thus the area sown to cotton was actually reduced between 1932 and 1937, while the output was doubled or (in Tadjikistan) trebled; and the area under grain everywhere showed an increase in yields varying from 30% to 50%. The explanation of this change is to be found mainly in the great increase in the number of tractors available—from the 773 of 1927–28 to 18,700 in 1932 and 57,800 in 1937.

¹ *Pyatiletni Plan* (1929), vol. iii, p. 299.

² *Ibid.*, p. 290.

But the biggest and most decisive change was that in industry, of which we have already seen a summary index. Yet there is some excuse for quoting more detailed figures, apart from the light they shed on the economic capacities with which each of the Union Republics of Central Asia entered the period of the second world war. As late as 29th July, 1941, in reference material made available by a painstaking British Government department for the use of journalists anxious to describe their country's new Ally, it was stated that "industrialisation is only beginning in the first four republics" (*i.e.*, excluding Kazakhstan) "and is based to a large extent on cotton. . . . Mineral resources in the republics are vast, but exploitation of these has not yet been undertaken on a large scale."

In reality, figures of a fairly detailed character had been published in 1939, in a volume wherein the State Planning Commission reported on the results of the fulfilment of the second Five Year Plan, in all branches of economy and in all Republics of the Union. This volume was on sale to the general public, including foreigners, both official and unofficial, living in Moscow. It is true, of course, that this was the time when it was fashionable to treat Soviet statistics with levity, and when allusions to the "feet of clay" and "false teeth" of the "Russian colossus" were always sure of winning a general laugh in Parliament.

It would be wearisome to set out in full the figures then published for the five Asiatic Republics, even for industry alone. But after the description of conditions in 1913 and 1928–9 already quoted, the following representative extracts, illustrating the main trend in the years of planned economic development, may be found illuminating (values are given in fixed 1926–7 prices):¹

¹ *Itogi Vypolnenia Vtorogo Pyatiletnego Plana* (1939), pp. 141–51.

	1932.	1937.
<i>Turkmenistan—</i>		
Electricity output (million kw.h.) . . .	25.5	57.1
Oil output (thousand tons) . . .	34	452
Metal industries (million roubles) . . .	6.9	33
Chemical industries (million roubles) . . .	0.2	0.9
Cotton goods (million metres) . . .	5.2	6.4
<i>Uzbekistan—</i>		
Electricity output (million kw.h.) . . .	93.6	276.2
Oil output (thousand tons) . . .	46.8	365
Metal industries (million roubles) . . .	32.2	146
Cotton goods (million metres) . . .	12.3	58.6
<i>Tadjikistan—</i>		
Electricity output (million kw.h.) . . .	1.5	28.1
Oil output (thousand tons) . . .	18.9	28.4
<i>Kazakhstan—</i>		
Electricity output (million kw.h.) . . .	66.5	238.3
Coal output (thousand tons) . . .	722	4203
Oil output (thousand tons) . . .	249	493.2
Metal industries (million roubles) . . .	14.4	108
Chemical industries (million roubles) . . .	4.9	14.4
Non-ferrous metallurgy (million roubles) . . .	35.4	102.5
Sugar output (thousand tons) . . .	3.1	43.1
<i>Kirgizia—</i>		
Electricity output (million kw.h.) . . .	12.4	28.9
Coal output (thousand tons) . . .	720	896
Sugar output (thousand tons) . . .	8.3	54.8

Obviously this very rapid industrial development required a drastic improvement of education and health services from the backward state described in 1928-29. Accordingly, we find the numbers of children at school (elementary, continuation and secondary) rising from 103,000 to 184,000 during the five years in Turkmenistan, from 644,000 to 932,000 in Uzbekistan (they had been 17,300, mostly Russians, in 1914), from 125,000 to 221,000 in Tadjikistan, from 576,000 to 1,022,000 in Kazakhstan, and from 146,000 to 265,000 in Kirgizia. There were equally significant increases in the numbers of students attending universities and places of higher education (from 18,200 throughout the five Republics in 1932 to

34,500 in 1937) and likewise in those studying in technical colleges (from 29,400 in 1932 to 48,800 in 1937). The number of newspapers had increased from 296 in 1932 to 718 in 1937, the overwhelming majority of them in the languages of the native majorities—who in 1914 had not, of course, a single daily newspaper.

The number of hospital beds had increased from 23,950 to 42,000, and of doctors from 3300 to 4900. As a result, there was now—in 1937—one doctor for every 3388 inhabitants, whereas we know that the number of doctors in Asiatic Russia in 1912 was one for every 37,600 villagers,¹ and by 1929, at least in parts of it, was not much larger.

A glimpse of the cultural advance as a whole, and of the pride which it has inspired in the peoples of Central Asia, is afforded by this passage in the speech of deputy Kurbanov, from the Kulyab constituency of the Tadjik S.S.R., at the Soviet of the Union on 26th April, 1945:

“In Tadjikistan,² where before the Soviet Power schools were literally numbered in single units, there is not an inhabited place now without its school. Today the Republic has a network of 2225 schools, among which are many continuation and secondary

¹ *Russian Year Book*, 1916, p. 464.

² Further references throughout this chapter, except where otherwise stated, are to reports of ordinary sessions of the Supreme Soviet of the U.S.S.R. Four of them are available in the verbatim transcripts published in volume form—the 10th (*Desyataya Sessia Verhovnogo Soveta SSSR*, 1944), from 28th January to 1st February, 1944; the 11th (*Odinnadsataya Sessia*, etc., 1945), from 24th to 27th April, 1945; the first after the elections of February, 1946 (*Zasedania Verhovnogo Soveta SSSR, Pervaya Sessia*, 1946) from 12th to 19th March, 1946; and the second (*Zasedania*, etc., *Vtoraya Sessia*) from 15th to 18th October, 1946. The last, at the time of writing—the 3rd, from 20th to 25th February, 1947—is available only in the newspaper accounts. For the sake of brevity, references will be indicated by a Roman numeral, followed by the page number or issue of a newspaper. The present passage is from XI, pp. 189-90.

schools. We have in the Republic seven places of higher education and 20 technical colleges, which thousands of students are attending. Whereas before the October Revolution, throughout the territory of present-day Tadjikistan, there were only 3 hospitals, now we have an extensive system of hospitals, polyclinics, medical aid posts and maternity homes. Tadjikistan has its own engineers, doctors, agronomists, and many thousands of teachers, writers, artists, composers, actors. Tens of newspapers are published in the Republic, we publish our own and translated literature, and the classical works of Marxism and Leninism, in our own language, and we have a wide network of radio and cinema. The cinema and the radio have penetrated into every corner of the Republic, including the 'Roof of the World'—the Pamirs.

"The creative work of the Tadjik people grows in strength and volume from year to year. The people play their own music, read their own works, display their multifarious, vividly colourful art in all its forms and varieties. The repertoire of the Tadjik theatres, side by side with the national productions and the works of the Russian classics like Gorki, Gogol and others, includes the works of the great English playwright Shakespeare—'Othello', 'Romeo and Juliet'—and also the works of Molière and other classics.

"By the way, I think it appropriate from the tribune of the Soviet Parliament to say a few words about the fact that a member of the British House of Commons, Graham, in a speech at the end of December last year allowed himself to call the Uzbeks and Tadjiks 'insignificant Asiatic tribes'. We do not intend to enter into a discussion with Graham, and put this speech of his down to what we may, speaking delicately, call his narrow-mindedness (*laughter*). We express our indignation to Graham in such a mild form only because we put this speech

of his down to his exceptional ignorance (*applause*). It is difficult to imagine that in the Parliament of democratic Britain there should sit, side by side with the honourable members of the House of Commons, a person who shares with the Hitlerites their hateful racial theory of the inborn superiority of some peoples over others!"

Thus, on the eve of the second world war the five Union Republics in Central Asia represented already a very different picture, above all in their industrial development, from that of twelve years before, and differed from the Central Asia of Tsarist times as day from night. *Turkmenistan* was no longer a backward cattle-breeding colony, but a country of solid industrial development and large-scale agriculture, based on big irrigation works. It had its own oil-wells and oil-cracking factories, its sulphur, sodium sulphate and glass works, its shipyards on the Amu Darya river and the Caspian, silk and cotton mills and food canneries at Ashkhabad and Chardjui. *Uzbekistan*, the most powerful and developed Republic of Central Asia, had rich coal and copper mines, oil-wells in a number of places, textile mills and agricultural machinery works, and the great Chirchik power-station. Industry accounted for more than 50% of its national income; and the level of its industry was much higher than that of Turkey, Iran and Afghanistan put together. At the same time it supplied the U.S.S.R. with 60% of its cotton. *Kazakhstan* had had 4000 miles of railways built in fifteen years, and more than 120 metallurgical, chemical, oil-cracking and other works had grown up during the period of the two Five Year Plans. Its coalfield of Karaganda had become one of the most important fuel bases of the Soviet East. At the same time it was an important source of grain, cotton and sugar for the Union.

and millions of cattle, sheep and horses covered its enormous pastures in spring and summer, and were kept in warmed sheds and fed on properly stored fodder during the winter. The cultural growth of *Tadjikistan*, illustrated earlier, was backed by a vast development of industry also—particularly of a wonderful variety of mining—during the second Five Year Plan: coal, zinc, lead, uranium, gold, silver, tungsten, bismuth and many other valuable materials. Silk, cotton, oil, fruit and vegetable canneries, and a great number of mountain roads and canals, had transformed the communications and living standards of the people. *Kirgizia* had been an autonomous region of the Russian Federation up to 1926, an Autonomous Republic for the next ten years, and a Union Republic from 1936. This rise in status from that of a national minority to that of a constituent sovereign State of the U.S.S.R. had its origin in economic advance—in the development of its mining, light and food-processing industries and power-stations, side by side with that of its agriculture in many different forms, the building of a network of railways (not a single line existed before 1917) and the settlement of the vast majority of its former nomads.¹

3. WAR-TIME INDUSTRIAL ADVANCE

The general effect of war-time development upon these Republics is most clearly indicated in parliamentary speeches by their leading representatives. Thus, in the case of *Kirgizia*, the President of the Presidium of its Supreme Soviet, deputy Tokobayev, said at the Soviet of Nationalities on 29th January, 1944, that “*Kirgizia*,

¹ For further vivid details, see Davies and Steiger, *op. cit.* The Soviet *Kalendar-Spravochnik na 1944* contains some later material on the pre-war position.

a former backward Tsarist colony, has become a flourishing Soviet Republic, with all branches of national economy developing tumultuously”.¹ Another deputy from the same Republic, Kulatov, at the Soviet of Nationalities on 26th October, 1946, was able to point to the fact that the coal mines of his country had become “a main fuel base of the Central Asian Republics”.² In the case of *Tadjikistan*, at the same session, deputy Sharipov said that “the former fief of Bukhara in a historically short period has become a Socialist Republic with a steadily developing economy, and a culture, national in form, Socialist in content”.³ We have already seen the earlier remarks of another *Tadjik* representative on the same subject.

Uzbekistan, said deputy Abdurahmanov, at the Soviet of Nationalities on 16th March, 1946, from a semi-feudal colony of Tsarism without any rights, “has been transformed into an industrial and prosperous republic, with a highly developed mechanised agriculture”.⁴ It had been transformed “into one of the biggest industrial centres of our country”, said an editorial in *Pravda* (26th October, 1946).

Still more emphatic were the claims that could be made on behalf of *Kazakhstan*. A characteristic statement was made by deputy Undasynov at the Soviet of the Union on 29th January, 1944:⁵

“During the war the importance of *Kazakhstan* as one of the mighty arsenals of our country has grown extremely. . . . Day and night trains are going to the front with food, munitions, armaments, the varied output of hundreds of factories and works created by the will of our party and people.”

¹ X, p. 128.

² II, p. 138.

³ *Ibid.*, p. 135.

⁴ I, pp. 160-1.

⁵ X, p. 76.

One of the deputies for Turkmenistan, Berdyev, on 18th March, 1946, also declared at the Soviet of Nationalities that his country "had changed from a backward agrarian country into a flourishing Socialist Republic, with widely-developed Socialist industry and advanced, mechanised agriculture".¹

While all these representatives stated that the main source of these changes was to be found in the policy of the Five Year Plans, they also showed the considerable industrial development which had been stimulated by war needs. On 29th January, 1944, speaking of *Uzbekistan*, deputy Abdurahmanov had stated at the Soviet of the Union:²

"During the war years new branches of industry were created—armaments, munitions, machine-tools, electrical equipment, chemicals, etc. Uzbekistan became one of the arsenals of the Red Army. During the years of war the output of industry has increased by 50% in the Uzbek S.S.R. The proportion of heavy industry in the total industrial output of the Republic reached nearly 50%, as against 14.3% before the war. The output of oil has been doubled. Our own coal base has been created. . . . The Uzbek Republic previously had no metallurgical industry, now it has one. . . . Big deposits of rare metals—wolfram, molybdenum, etc.—are being intensively developed. . . . During the war years four power-stations with a capacity of 72,000 kw. have been built and put into use, and another 10 hydro-electric stations, with a capacity of 185,000 kw., including the Farkhad power-station, the pride of the Uzbek people, are under construction. The age-old dream of the Uzbek people, of making use of the vast and stormy waters of the Syr-Darya river, is coming to life."

¹ I, p. 211.

² X, p. 67.

Two asbestos and cement works had been built in Uzbekistan in war-time, added Sosnin, People's Commissar for Building Materials of the U.S.S.R., at the same session of the Supreme Soviet.

In 1946, deputy Abdurahmanov reported at the second session of the Supreme Soviet that super-phosphate works had been completed at Kokand, big progress was being made at the Angren open-cast colliery, and that the Farkhad power-station was near completion.¹ Uzbekistan now had over 300,000 workers and technicians in its industry, reported *Pravda* on 2nd November, 1946, in an article by Sultan Umarov, Rector of the Central Asian University. Oil output in the new Ferghana field had been multiplied six times during the war years, he added, and thousands of workers had come from the villages to live in new, well-built industrial settlements there, with electricity and gas supply and other modern amenities. Since 1940 ten big irrigation canals, over 600 miles in total length, had been built, wrote Muminov, President of the Presidium of the Uzbek Supreme Soviet, in *Izvestia* of 25th January, 1947: they had made it possible to irrigate about 1 million acres, and to improve the water-supply over an area half as large again. Cotton output had in consequence been doubled, and the plan of cotton deliveries to the State for 1946 had been over-fulfilled, as were also those of a number of other agricultural products and of oil.

Particular importance was attached to the launching of the new Uzbek metallurgical works, which began construction early in 1943, produced its first steel in March, 1944, and was fully working by the end of October, 1946. Peasants by the thousand had come from the cotton- and fruit-growing areas of the Republic, by horse, camel and

¹ II, p. 99.

donkey, to join in the work, training to become constructional engineers, welders and cement-workers. Eight hundred young Uzbeks from the collective farms had been sent to the big works of the Urals and Siberia to learn the technique of open-hearths and rolling-mills. The first charge-hand in the smelting department of the new works was an Uzbek, Kasymov, who was making steel workers out of collective farmers from the Ferghana and Kokand valleys.¹

In the process of this great industrial development the Uzbeks were learning with some success to manage their industry efficiently. Abdurahmanov, in the speech of 17th October quoted earlier, reported that during nine months of 1946 the food industry of the Republic had fulfilled its plan 102%, the tobacco, perfumery and similar industries by 108%, the meat and dairy industry also 108%: on the other hand, the production plans of local industry (*i.e.*, small-scale works and factories under the local authorities, not planned in the Union scheme) had been completed 97.5%, and textile output was also less than planned. In 1946, it was reported at the Soviet of Nationalities in February, 1947, four new power-stations and the Ferghana hydrolysis works had been completed in addition to those mentioned earlier, and plants producing machinery for the cotton-fields and for textile factories begun.²

As a result of all these changes, the industrial output of Uzbekistan already represented 75% of the total production of the Republic by 1942. At the same time a very great increase in agricultural output had taken place, leaving the levels of 1940 far behind, and on the whole fulfilling delivery programmes completely.

¹ *Pravda*, 26th October, 1946.

² III, *Izvestia*, 21st February, 1947.

Kazakhstan presented a similar picture. Output of coal increased 50% during the war years, reported deputy Chulanov at the Soviet of Nationalities on 26th April, 1945. Copper smelted in 1944 was 49.5% greater in quantity than in 1940; in 1943, it had been reported a year earlier, the copper output was 26.9% above the 1940 level—an indication of the speed at which output was increasing. Other non-ferrous metals had been made available. In 1943 alone dozens of new works were built—the first section of a ferro-amalgam works at Aktyubinsk, a manganese mine at Djezdinsk and many power-stations—and an agricultural machinery works and metallurgical works at Karaganda begun. In 1944 these works were finished, together with a lead and zinc works at Tekeli.¹ At the beginning of 1947, surveying these and other results of the war years, Shayakhmetov, secretary of the Communist Party of Kazakhstan, reported that the steel works built at Temir Tau, in which Russian foremen from the Urals had been training former nomads, had completed their programme of output in 1946 ahead of schedule. In addition to a number of power-stations built during the war years at Karaganda and on Lake Balkhash, thanks to the development of the oil and coal industries, the biggest power-station in the Republic was under construction on the river Irtysh.²

Industrial output in Kazakhstan, which had represented less than 7% of its total volume of production in 1920, amounted to 66% in 1946.³ Yet here, too, there had been a great increase in some branches of agriculture. During the four war years the collective farms of the Republic supplied to the State 250,000 tons of meat more than in the five years before the war. In 1944 and 1945 they sent

¹ X, pp. 76-7, and XI, p. 141. ² *Izvestia*, 16th February, 1947.

³ *Pravda*, 1st June, 1946.

more than 500,000 head of cattle to the liberated areas. Yet they finished the year 1945 with 4,200,000 more head of cattle than in 1940.¹

In *Tadjikistan* the building of roads, railways and canals, and the extension of the mining of valuable ores, were reported during and after the war years as the main fields of new construction in industry. But the mastery of industrial processes by this formerly backward people was indicated by such facts as the fulfilment of production plans for 1943 in the light industries of the Republic by 102%, the food industries by 106%, the local industries by 118% and the co-operative industries by 124%.² During the first nine months of 1946 the plan of output of the 270 factories of the Republic was fulfilled 104%.³

Agricultural deliveries had also been over-fulfilled in this Republic, as in others, in the war years and right up to the end of 1946; and Rasulov, chairman of the Council of Ministers of Tadjikistan, announced in *Izvestia* on 14th February, 1947, that Socialist emulation had begun in the Republic to complete the fourth Five Year Plan by the twentieth anniversary of the foundation of the Tadjik Republic, in 1949.

Deputy Berdyev (President of the Presidium of the *Turkmenistan* Supreme Soviet), at the Soviet of Nationalities on 18th March, 1946, stated that in his Republic in war-time oil-cracking works had been built and chemical works reconstructed and extended, a power-station begun at Ashkhabad, the freight capacity of the Ashkhabad railway

¹ Deputy Kazakpayev at the Soviet of Nationalities, 16th March, 1946 (I, p. 168).

² Deputy Kurbanov at the Soviet of the Union, 29th January, 1944 (X, p. 59).

³ Deputy Sharipov at the Soviet of Nationalities, 16th October, 1946 (II, p. 136).

and Krasnovodsk harbour doubled, and big irrigation works carried out.¹ A year later, on 21st February, 1947, deputy Babayev reported at the Soviet of the Union that Turkmen industry in 1946 had fulfilled its plan 100.7%. At the same time, cotton deliveries for the year had been fulfilled 117.1% (with an increase in yield of 27%), deliveries of grain 103%, deliveries of silk cocoons also 103%, and other agricultural deliveries in like measure. In 1947 the Republic was beginning the construction of the Kara Kum Grand Canal, 275 miles long, to irrigate over 160,000 acres of desert, with the prospect that lengthening it, when completed, by another 110 miles would raise the irrigated area to over 600,000 acres.²

In *Kirgizia*, during the war years, collieries and ore mines were built, and over thirty big industrial plants. These included sugar factories, a big combine for the extraction of antimony and mercury, several processing factories for other rare metals, food canneries and an important power-station on the Chui Grand Canal, together with many new irrigation works. A railway of great economic importance—the Kant-Rybachye line, opening up the Djezgalan coalfield in Northern Kirgizia—began to be constructed in 1943. That year all the main industries of the Republic over-fulfilled their plans, the output of non-ferrous metals being doubled compared with 1940, with the same result in the local industries, while light industry increased its output by 87% in comparison with 1940.³ The following year the output of the non-ferrous metals was more than two and a half times that of 1940, in the light industries it was double, and in

¹ I, pp. 211–15.

² III, *Izvestia*, 23rd February, 1947.

³ Deputies Tokobayev (Soviet of Nationalities, 29th January, 1944) and Kulatov (Soviet of the Union, 31st January, 1944), X, pp. 125–6, 192–3.

local industries 3.7 times the 1940 level.¹ In 1945 and 1946 scores of works over-fulfilled their plans; and several more coal mines and factories were under construction.²

In 1945 Kirgizian industry, represented before 1917 by a total of fifty-five handicraft workshops, numbered many hundreds of modern industrial establishments, the gross output of which represented 70% of the entire output of the Republic.³ At the same time, agriculture in the war years had met the needs of the national emergency as in other Republics. In 1943, the area sown to crops was about 270,000 acres more than in 1941, and in 1944 the big increases in output of grain and meat by the collective farms enabled them to deliver three times as much to the State as in 1940.⁴ Stakhanovite work secured an average output per hectare of 60 to 70 tons of sugar-beet, and of more than 5 tons of cotton, throughout Kirgizia.⁵

One war-time result of special importance was the final breaking down of the barriers to equal economic opportunity for women inherited from the recent feudal past, and therefore the release of a great reservoir of creative energy. Thanks to education, to the spread of the lighter and processing industries, and to the firm application of the principle of equal pay for equal work, the women of Central Asia were to be found in latter Soviet years taking jobs in factories in increasing numbers; but they were still a minority. The heritage of centuries, when women had no rights except to work at home, was not to be overcome quickly. As late as 1929, in the first Five Year Plan, it was stated that labour problems were especially acute in Central Asia, owing to the lack of native skilled workers,

¹ Deputy Janaliev (Soviet of Nationalities, 26th April, 1945), XI, p. 163.

² *Izvestia*, 14th February, 1947.

³ *Pravda*, 1st and 3rd March, 1946.

⁴ Kulatov, 31st January, 1944, and Janaliev, 26th April, 1945, *ut supra*.

⁵ *Pravda*, 3rd March, 1946.

of arrangements to employ poor peasants at seasons free from field works, etc. A special problem was presented by "the utilisation of the labour of women, who up to this day are still placed in an isolated position, and need special measures to overcome age-old stagnation". They could not be used as workers, said the authors of the 1929 Plan, except in silk-growing and co-operative handicraft. For Uzbek women, in particular, agriculture was "closed".¹

A very different picture appeared in Central Asia after the war of 1941-45. Women of Uzbekistan twenty-five years ago still wore the black horsehair *parandja* over their heads, wrote the Rector of the Central Asian University in the article we have quoted (2nd November, 1946). "They were downtrodden slaves, without rights. Now Uzbek women adorn the ranks of our multi-loom weavers, of the foremost cotton-growers, of education, health and art." In Kirgizia, said deputy Janaliev at the Soviet of Nationalities on 26th April, 1945,² "our Kirgiz women are affording tremendous help to the country and to the front. Thousands of them have taken their stand at machine-tools in war factories, on building jobs; have gone down into the coal-pits and ore mines, taken their seat at the driving-wheel of the tractor, replacing those who have gone to the front." A letter signed all over Kirgizia at mass meetings, and bearing a total of 815,000 signatures of Kirgiz workers, peasants and intellectuals, was published in *Pravda* on 3rd March, 1946, on the subject of the achievements of the Republic in war-time; it mentioned that there were now Kirgiz women engine-drivers, and that they included Stakhanovites in the sugar-beet fields, as well as doctors and actresses. Even in remotest Tadjikistan the part played by women among

¹ *Pyatiletni Plan* (1929), vol. iii, p. 318.

² *Ut supra*, XI, p. 163.

the numerous personnel in industry, agriculture and education had grown "immeasurably" during the war, said deputy Kurbanov at the Soviet of the Union on 29th January, 1944. Nor is it only in economic pursuits alone that the transformation of the part of women, in countries so recently plunged in superstition and barbarism, has been profound. Kazakhstan, for example, boasts that the only two women of the Soviet East who during the war earned the title of "Hero of the Soviet Union" for valour in battle were Kazakh girls, Aliya Moldagulova and Manshuk Mametova—the latter a senior sergeant in a machine-gun unit, who fell in battle for the liberation of the town of Nevel, in Western Russia (the town Soviet named one of the streets after her, immediately upon liberation).¹

4. PROBLEMS AND PROSPECTS

Of course the changes described in the preceding pages were not made without great difficulties, nor was success uniform in all directions. Every economic problem brought in its train human problems, just as it did in other parts of the U.S.S.R. economically more advanced. A survey of some of these problems, revealed in the discussions of the Soviet Parliament and the Soviet newspapers, will be useful in understanding the magnitude of the new tasks which the Soviet Republics of Central Asia have set before themselves under the fourth Five Year Plan.

One problem is that of *economic management*. Thus, the Ferghana cotton combine, in Uzbekistan, worked without loss in 1943, but the following year, with the extension of its operations, it used 10.4% more raw material than had

¹ X, p. 74, and I, p. 167.

been planned, with the result that it showed a loss of 11 million roubles. The Kokand stocking factory of the same Republic in 1944 increased its costs by 45%, nearly doubling the expenditure of raw material per unit of output. As a result, it showed losses and a bad financial situation at the end of the year.¹ In 1946 the vehicle-building works and iron-foundry of the Uzbek S.S.R. were used to less than 25% of their output capacity, and consequently showed bad financial results of the year's working. The year's plan of output of footwear, stockings, furniture and ironware was carried out by Uzbek locally controlled factories only 35-40%. In the same year, brickworks in the Uzbek, Kazakh and Turkmen Republics fulfilled their year's plan only to the extent of 40-60%, owing to inadequate attention by the authorities of these Republics, who invested less in these enterprises than had been planned, leaving them in particular with insufficient fuel and manpower.² In the Kazakh Republic, up to 1st September, 1946, only 20% of the year's vote for housing and hotel construction, and 23% of the vote for municipal building, had been used. The building organisations generally were working badly in that Republic in 1946: the building organisation of its Ministry of Municipal Economy at Alma Ata (the capital of the Republic) contrived to employ four clerical and technical staff for every ten workmen, with the result that the building machinery was insufficiently used, and in the first half-year the organisation carried out its plan only 23.8%.³ In Turkmenistan some directors of plants, and some

¹ Deputy Kuliev at the Soviet of the Union, 25th April, 1945 (XI, p. 28), and deputy Khokhlov at Soviet of Nationalities, same day (*ibid.*, p. 82).

² *Izvestia*, 30th January, 1947.

³ Deputy Khokhlov at the Soviet of Nationalities, 16th October, 1946, II, p. 96.

Ministries, were in 1946 devoting more attention to quantity of output than to reducing costs and mobilising internal resources. Thus, the oil industry of the Republic, which fulfilled its plan of output 100.2%, did not fulfil its plan for boring new wells—with the result that the commercial cost of one metre of borings was 470 roubles, instead of the planned figure of 370 roubles.¹

However, it would be no more useful a guide to the future industrial efficiency of these newcomers among industrial States to draw hasty conclusions from cases like these, than it proved for those wiseacres among learned economists and others in western countries who did so during the first Five Year Plan.

A second problem, akin to the first, is that of the *inexperience* of the tens of thousands of workers first brought from the villages into industry, and among the handicraftsmen who in war-time conditions were intensively encouraged to develop co-operative forms of production outside the big factories.

In 1946 the locally controlled coal-mines of Kirgizia carried out their production plan less than 33%, owing to the low productivity of labour and unpreparedness of the workers. In Turkmenistan and Uzbekistan production at such pits was also lower than plan.² In Uzbekistan, again, industrial co-operatives were not properly supervised during the later war years, with the result that in the first nine months of 1946 one-third of them showed a deficit, their accumulation or profit fell to less than one-third of the 1940 level, and the Uzbek State in consequence received only 23.1 million roubles from them in income tax, instead of the planned figure of 43 million roubles.

¹ Deputy Berdyev at the Soviet of Nationalities, 22nd February, 1947 (III, *Izvestia*, 23rd February, 1947).

² *Izvestia*, 30th January, 1947.

There were frequent cases of waste of raw material, inadequate use of mechanical equipment and low productivity of labour in these artisan co-operatives.¹ Again, at the first session of the Soviet of Nationalities elected in February, 1946, deputy Kazakpayev (Kazakhstan), drew attention to the great shortage of trained personnel in his Republic, compared with the rapid development of heavy and non-ferrous metallurgy, the chemical and engineering industries, and the railways. Only two places of higher education out of twenty-four were training higher personnel for industry, and only twelve technical schools out of eighty-five.²

Problems of growth, created by the realisation of growing needs and of immense but as yet undeveloped natural resources, represent a third group of difficulties.

Uzbekistan had practically no timber, and hence encountered great difficulties in providing the necessary houses for workers in its new enterprises under construction at Tashkent, Chirchik, Andizhan and other of the rapidly expanding industrial centres. They needed a grant from the Union Budget of 90 million roubles for 1946, making possible the construction of 163,000 square metres of housing space, said Abdurahmanov at the Soviet of the Union on 18th March of that year; but they had only been granted 30 million roubles.³

At the Soviet of Nationalities, on 21st February, 1947, he complained that the Central Asia Steamship Company, under the Ministry for River Shipping of the U.S.S.R., had not delivered the planned quantities of oil fuel, mineral fertilisers and agricultural machinery to the

¹ Deputy Abdurahmanov at the Soviet of Nationalities, 16th October, 1946 (II, p. 36), and deputy Kornietz, at the Soviet of the Union, the same day (*ibid.*, p. 100).

² I, p. 170 (16th March, 1946).

³ I, pp. 164-5.

Khorezm region of the Uzbek Republic and to the Karakalpak Autonomous Republic, which is situated within its frontiers—although the nearest railway was from 300 to 500 miles away, and they had no other means of communication. Big quantities of their cotton had accumulated at the river-side in consequence. The Union Government had intervened to ensure fuel deliveries by road, but this was difficult and costly. The speaker asked that plans should immediately be put in hand for the building of a railway to these parts. In Southern Uzbekistan, he pointed out also, lack of water could be overcome only by using the Amu-Darya river, and he pressed (successfully) for provision in the Budget for preliminary surveys.¹

A similar problem for Kazakhstan was raised at the March, 1946, session of the Soviet of Nationalities. A big dam at Kzyl-Orda, on the Syr-Darya river, would add 300,000 acres to the irrigated area, and make possible the building of a badly needed large power-station. Construction work had begun in 1940, was then interrupted by the war, and had been resumed in 1945. The Union Government had decided to finish the work in 1948, but the draft of the fourth Five Year Plan now postponed it to after 1950. The deputy concerned pressed for fulfilment of the original scheme (but the final text of the Plan shows that he was not successful in this).² At the same meeting of the Supreme Soviet, a developing bottleneck in transport was reported from Tadjikistan, and an urgent grant of 28 million roubles to commence railroad construction in the southern areas of the Republic was asked for. Steps should be taken to open up the Kshtut-Zauran and Ravat coalfields, which could become the "Central Asian

¹ III, *Izvestia*, 22nd February, 1947.

² Deputy Kazakpayev, 16th March, 1946 (I, p. 169).

Donbass", was another request by the spokesman of the Tadjik Republic; furthermore, if the new cement works at Stalinabad were only extended to a capacity of 15,000 tons, the growing needs of construction in the Republic would necessitate importing from other parts of the U.S.S.R., and double the figure mentioned ought to be provided for.¹

In Turkmenistan in March, 1946, it was a question of the oil-cracking works having a higher capacity than existing oil-wells could provide in the shape of crude petroleum, and measures were demanded to double output of the latter.² In February, 1947, the Turkmen Government was also pointing to the urgent need for more cement to cope with industrial construction and irrigation schemes. Before the war a cement works was under construction at Bezmain, and the factory buildings were already erected, with housing for the workers: but here it was a question of getting the necessary equipment from enterprises under Union jurisdiction, which evidently had other priorities, and the works could not get started. Deputy Berdyev asked for help in this respect, so that production could begin in 1948.³ Kirgizia at the end of 1946 was pleading for more mechanisation to be available for its big coalfields at Kzyl-Kia, Sulyukta, Kok-Yangak and Tashkumyr, and also for improved living conditions for its miners: defects in this respect were preventing these fields from fulfilling their plan. At the same time it pointed to the need of developing more rapidly the Uzgen coalfield, because of the high-quality coking coal it could provide, and the Djezgalan field in Northern

¹ Deputy Kurbanov, at the Soviet of Nationalities, 16th March, 1946 (I, pp. 110-11).

² Deputy Berdyev, at the Soviet of Nationalities, 18th March, 1946 (I, p. 215).

³ III, *Izvestia*, 23rd February, 1947.

Kirgizia, because it would stimulate industrial and transport development there and serve the neighbouring districts of the Kazakh Republic.¹

Naturally, such requests, usually put forward over and above the planned expenditure, raise return queries about the efficiency of the finances of the Republics themselves, which by better housekeeping could meet some of the costs from their own resources. Deputy Sharipov (Tadjik Republic) said at the Soviet of Nationalities on 16th October, 1946, that there were still "considerable failings" in respect of the struggle against waste, breaches of financial discipline, excessive costs of production, and inadequate collection of revenues by the financial authorities of Tadjikistan.²

A special problem created by the war was felt, immediately after its conclusion, in the *agriculture* of Central Asia. The successes in some urgent directions had, in prevailing conditions of shortage of manpower, accompanied a decline in others during the war years. Thus, in Kazakhstan, where cattle and grain deliveries were so successful, there was lowered attention to industrial crops in 1943, and the plan of cotton deliveries that year was not fulfilled.³ In Uzbekistan, again, grain and meat output grew so much that in 1943 the Republic became self-supporting in grain, whereas previously it had imported 45,000 truckloads per annum.⁴ But cotton production fell in the war years, and over 1.1 million acres of cotton-growing lands were left uncultivated in 1946.⁵

¹ Deputy Kulatov at the Soviet of Nationalities, 16th October, 1946 (II, p. 138).

² *Ibid.*, p. 135.

³ Akimov, People's Commissar for the Textile Industry, at the Soviet of the Union, 31st January, 1944 (X, p. 212).

⁴ Deputy Abdurahmanov at the Soviet of the Union, 29th January, 1944 (X, p. 68).

⁵ Voznesensky, *Report on the Five Year Plan* (1946), p. 33.

These and similar adverse effects of the war were dealt with in the resolution on agricultural problems adopted by the Central Committee of the Communist Party in February, 1947. The main cotton-growing regions had succeeded in 1946 in raising their gross output and the yield of cotton; but there were still serious defects impeding the further progress of the industry:

"In consequence of the wrong use of irrigated lands in a number of districts, particularly in the Uzbek S.S.R., substantial areas of irrigated land have fallen out of systematic agricultural use. There are wrong exploitation of irrigation systems, insufficient use of machinery, breaches of the requirements of agricultural science in respect of dates and quality of cultivation, watering and other agricultural works: sowing of grasses develops slowly: and rotation of crops is being introduced and established unsatisfactorily.

"In a number of regions and districts the collective and State farms secure low yields of cotton, and do not fulfil State delivery plans.

"Particularly unsatisfactory was the cotton harvest of 1946 in the Khorezm and South-Kazakhstan regions, and in several other districts, in the Uzbek and Turkmen Soviet Socialist Republics."¹

Once again it is possibly desirable to warn the reader that this kind of searching self-criticism in the U.S.S.R. means, not that an economic crisis is on the way, but that, on the contrary, energetic measures are in progress, from below as well as from above—earlier chapters of this book have shown how the two methods are combined—to overcome these and other weaknesses of growth.

It is interesting that, among the practical measures for the cotton-growing regions outlined in wide variety by the

¹ *Izvestia*, 28th February, 1947.

resolution of the Central Committee, it was required that there should be an end of the ancient method of irrigation by allowing periodical floods, still practised in other important cotton-growing countries outside the U.S.S.R.

There was no doubt, in the U.S.S.R. at any rate, that these problems would be overcome, and that the Central Asian Republics, using the industrial achievements of the war period as a most advantageous point of departure, would be able in the years immediately ahead to employ the utmost energies of their people in expanding their resources and raising standards of living. For this purpose they retained to a considerable extent the output of those industries which in the years of war supplied the Red Army: moreover, the fourth Five Year Plan provided that they should retain the total output of mass consumption goods of their local industry and of co-operative handicraft. This in turn, as has been shown, required the development of local sources of fuel, the expanded production of local building material and timber resources, and the further expanding of the production of iron, steel and machinery for the needs of locally controlled factories.¹ Hence it was that the fourth Five Year Plan, when providing for a general increase in industry throughout the Union of 48%, made provision for a much larger rise in the case of the Asiatic Republics—56% for Tadzhikistan, 76% for Turkmenistan, 89% for Uzbekistan, 110% for Kirgizia and 120% for Kazakhstan. It provided in particular for an increase of 80% in the output of their locally controlled industry. Their output of coal, iron, steel, chemicals and electric power remained, under the fourth Five Year Plan, an important section of the total production in these basic industries throughout the U.S.S.R.

¹ See also Sukharevski, *Sotsialisticheskoe Vospriizvodstvo v Novom Pyatiletnem Plane*, in *Bolshevik* No. 9 (May, 1946).

By 1950, under the fourth Five Year Plan, the Asiatic Republics will be numbered among the leading industrial countries of the world. Thus, for example, Uzbekistan will be producing more coal than Sweden or Italy, New Zealand or Southern Rhodesia did in 1938, more oil than Burma or the Argentine and nearly as much as Holland, more sugar than Canada or Switzerland. Kazakhstan is to produce more coal than such countries of heavy industry and advanced economy as Australia or Canada, Holland or Czechoslovakia did in 1938, more oil than Burma or any European country except Rumania, while in the output of electricity and sugar it will be almost on a level with Uzbekistan.¹

The consequence of this advance from feudal poverty, which will have taken less than twenty-five years in all, must be far-reaching. Already on 1st February, 1944, when explaining at the Supreme Soviet of the U.S.S.R. the need for giving the Union Republics more control of foreign relations affecting their specific interests, and the advantages of setting up their own defence departments and army formations, Molotov pointed to (i) "a great expansion of the activities of the Union Republics which has become possible as a result of their political, economic and cultural growth—or in other words, as a result of their national development", (ii) the advance from colonial or semi-colonial status which had created "not only cadres of rank-and-file fighters but also certain cadres of commanding personnel, capable of directing the appropriate army units", (iii) the emergence of "quite a number of specific economic and cultural requirements" of the Union Republics in foreign affairs, which could be best met by direct relations between those

¹ Cf. figures in *Law on the Five Year Plan* (1946) and in the *League of Nations Statistical Year Book* (1939-40).

Republics and other States.¹ The further development provided for in the years 1946-50 will make the Asiatic Republics of the U.S.S.R. still more capable of playing a worthy part in the arts of peace, and particularly in the extension of mutually beneficial economic and cultural relations with their neighbours, and with the whole civilised world.²

¹ V. M. Molotov, *New Powers of the Soviet Republics* (Soviet War News, 1944), pp. 4, 6, 10.

² From *Literaturnaya Gazeta* of 15th March, 1947: "Tashkent. Many Uzbek writers are working at translations of Russian and Western literature into their own language. The writer Abdulla Kakhar is completing his translation of the first volume of Tolstoy's 'War and Peace'. The poet Gafur Galam is translating Dante's 'Inferno'. The poet Sheikh-Zadeh is working at a translation of Byron's 'Childe Harold'. He has also translated Shakespeare's 'Hamlet' for the Khamza Academic Theatre of Drama. Mirtemir Tursunov is finishing a translation of Homer's 'Odyssey'."

AFTERWORD

The conclusions from the foregoing chapters might be summarised as follows:

1. Soviet planning has always had to reckon with the real world in which the U.S.S.R. found itself, and not with some abstract or invented world in which the Soviet leaders could afford to ignore the question of good relations with other States.

2. Soviet planning may be purposeful in its general direction and its methods, but the latter remain elastic, and Soviet planners are well aware that men and women, and not orders, "trends" or statistics, are the ultimate and decisive factor in economic affairs.

3. Tested by two measures—a rising standard of living in the years before the war, and the victorious solution of war problems far greater than those which crushed Tsardom in 1914-17—Soviet planning has been increasingly successful; and the more successful it has been, the more effectively have millions of ordinary men and women been drawn into the effort of collective planning.

4. Just because direct participation of the individual in the planning, however imperfect, of industry, agriculture and trade is an integral part of the Soviet way of life, in Asia as in European parts of the Union, the individual citizen's sense of proprietorship in the Soviet enterprise is a matter of personal experience and not of propaganda.

It is regrettable that these essential truths are ignored in even a responsible official document like the Government White Paper, *Economic Survey for 1947* and its popular edition, *The Battle for Output*. According to its authors,

there exists in the world today what they called "totalitarian planning", which "subordinates all individual desires and preferences to the demands of the State". For this purpose "it uses various methods of compulsion upon the individual which deprive him of the freedom of choice". It believes in "rigid application by the State of controls and compulsions".¹

On the other hand, there is "democratic planning". This "preserves the maximum possible freedom of choice to the individual citizen." It is "as flexible as possible". It "must be much more a matter for co-operation between the Government, industry and the people" than its totalitarian counterpart. It involves "the combined effort of the whole people".²

One can scarcely doubt, of course, that the first picture was of Soviet planning, and the second of planning as the authors of *The Battle for Output* intended to conduct it in Great Britain. Events in later months of 1947, unfortunately, provided a sad commentary on those intentions. But the very passages in which they amplified their picture of democratic planning must, to the student of Soviet economy, show how misleading it is to dismiss the planning of the U.S.S.R. as "totalitarian" and rigid subordination of the individual to the State.

"Under democracy, the execution of the economic plan must be much more a matter for co-operation between the Government, industry and the people than of rigid application by the State of controls and compulsions." And is not the economic planning of the U.S.S.R. just such co-operation? Do not all the pronouncements of Soviet statesmen on the principles of Soviet planning emphasise that it cannot exist, and could have no success, without such co-operation?

¹ *The Battle for Output*, pp. 5, 11. ² *Ibid.*, pp. 6, 10-11.

Nor is it only a question of principles. What has any other system of planning to show, so far, that is comparable to the practice whereby in the U.S.S.R. the plans drafted are sent down, stage by stage, for discussion in the lowest units of the economic machinery of the country—the factories and the collective farms, the village meetings and the town Soviets; and this not once but several times yearly, in one shape or another (results of the last year's working, supervision of fulfilment of the present year's plan, plans for next year); and this, again, not for the last year or two alone, but for nearly twenty years already?

"When the working pattern has thus been set, it is only by the combined effort of the whole people that the nation can move towards its objective." And is not the planning of the Soviet Union, in its draft stage as well as in performance, the combined effort of the whole people? What is Socialist emulation in industry, and what is counter-planning in the factories, but the combined effort of the wage-earning section of the people (including technicians and managers)? What are the annual plans drawn up by the collective farms at their general meetings, and the regular supervision of their fulfilment, throughout the year, by the collective farm members—but the combined effort of this still vaster section of the whole Soviet people? It would have been interesting if the authors of the White Paper had mentioned any other country in which such popular participation in planning exists.

"The task of directing by democratic methods an economic system as large and complex as ours is far beyond the power of any governmental machine working by itself, no matter how efficient it may be." That was a very wise remark, and it was almost precisely what Lenin and Stalin and Molotov have said more than once about the nature of planning in the U.S.S.R., as we have seen

earlier in this book. But in peace-time conditions planning by the governmental machine itself has not had the opportunity in Britain to go very far, much less the extension of planning beyond that machine. The notorious obstacles, active and passive, which were encountered after the end of the second world war by the Joint Production Committees in British factories—the one very tentative step made towards popular participation, in some parts of planning, during the war—are hardly likely to be put down as assets in this respect, by the authors of the White Paper. In the Soviet economy, on the other hand, chapters II, III and IV of this book give sufficient material for judging whether the planning of the U.S.S.R. is confined to a “governmental machine working by itself”.

Speaking of the direction of labour, the White Paper said that “a democratic Government must therefore conduct its economic planning in a manner which preserves the maximum possible freedom of choice to the individual citizen”. And wherein does this not apply in full measure to the individual citizen of the U.S.S.R.? There is no direction of labour for him in peace-time.¹

¹ These pages were already in type when *Forced Labour in Soviet Russia*, by Mr. D. J. Dallin (Hollis and Carter, 1948), was published. Space prevents more than a brief notice of the wilder mare's nests on which it is based. (i) It is not true that the use of prisoners for large-scale corrective works of national importance is now kept secret—as reference to the Soviet Encyclopaedias (volumes published in 1940 and 1948) and to a standard legal text-book (*Administrativnoye Pravo*, 1946, pp. 191, 244–6) will show. (ii) If Mr. Dallin's suggestions about the numbers of such prisoners—10–12 millions, 85–90% of them males, 30–40% dying yearly—were true, it would mean that from a quarter to a fifth of all Soviet males are in the camps (heavily guarded), and that the U.S.S.R. loses about a twelfth of its male population aged 15–59 yearly (see Dr. F. Lorimer, *Population of the Soviet Union*, 1946, pp. 122, 143)—a manifest absurdity. (iii) The list of 37 labour camps and 1 group of camps which Mr. Dallin reproduces on the basis of a collection of letter-heads (pp. 74–83) made by released

He is free to take a post and change it as he pleases—with more reality than in countries where there is a standing reserve army of unemployed. His freedom is not limited by interference with his personal life as a condition of employment, such as that daily practised by big banks and broadcasting corporations elsewhere. He does not meet with refusal to recognise his right to join a trade union, or to engage through its machinery in collective bargaining. The penalties for breach of contract by a worker in the U.S.S.R. are far lighter than anywhere else. Soviet women meet with no discrimination on account of their sex, either in access to any employment whatsoever or in the wages they receive for doing the same work as men. Racial and colour discrimination, in employment or in education, or in public transport, or in freedom to move about the streets, are crimes punishable by hard labour

Polish officers—the only *documentary* evidence he vouchsafes, apart from stories by anti-Soviet emigrants—would account for some 46,000 inmates (he says there are 1200 in each). Quite arbitrarily, however, he multiplies this by 200, suggesting that the letter-heads refer to “clusters”, each of 20 “regions” of 10 camps each: and thus arrives at a grand total exceeding 9,000,000. *It is not true that there is any mention of either “clusters” or “regions” in the letter-heads: all but one of them refer specifically to single camps, directly under the Ministry of the Interior. The exception is the letter-head of the Magadan office of the North-Eastern (Dalstroy) camps—but that too does not mention “clusters” or “regions”, or give any other indication of how many camps come under its management.* (iv) It is quite untrue that the Kolyma goldfields have not been mentioned for 10–12 years (*e.g.*, see the *Physical Geography Reader* for secondary schools, pp. 344, 364, or the *Geography Textbook* for teachers' training colleges, pp. 61, 67, 199, both published 1946). (v) *No evidence is offered for the suggestion (p. 252) that the labour camps are “an organic element of the Soviet entity”, and that without them “the proud Five Year Plans would have ended in a fiasco”. The one attempt to do so, by producing estimates of the value of work done by the labour camps in the Russian Republic (R.S.F.S.R.) in 1932 (p. 211), is itself a fiasco. For their total output, including agricultural works, is put at 305 million roubles: whereas the industrial output alone of the R.S.F.S.R., that year, was 31.4 milliard roubles—*

under Soviet law: they are not so, in some countries which claim the title of democracy.

"Our methods of economic planning must have regard to our special economic conditions. Our present industrial system is the result of well over a century's steady growth, and is of a very complex nature. The decisions which determine production are dispersed among thousands of organisations and individuals. . . . It is of the first importance that planning in this country should be as flexible as possible."

And has not the U.S.S.R. also "special economic conditions"? Could it be otherwise, in a country which thirty years ago was the Russian Empire—practising the most backward agriculture in Europe, industrially the most under-developed among the Great Powers, ruled by a landowning class still but little weaned from the habits of feudalism, with a large proportion of its peoples living

one hundred times as much (*Itogi Vypolnenia Vtorogo Pyatiletnego Plana*, 1939, p. 46). Timber exports, which Mr. Dallin tells us were among the main objects of the camps and had to be "stepped up" from 1934 onwards, to make machinery imports possible, were actually halved in volume by 1938, and reduced by nearly 25% in value! As for gold exports—Mr. Dallin's other mainstay—the foreign trade figures for 1934-8 show a large positive balance, which made such exports unnecessary.

There is a mass of other evidence to show that his book only demonstrates the headstrong anti-Soviet prejudices of its author.

So far as the substance of the matter is concerned, it is well known that Soviet penal policy is based on the principle of corrective labour. This is applied at all stages—in the shape of supervised work at one's own job for light offences, work in corrective labour settlements for sentences up to three years, employment on big public works (canals, railways, land improvement schemes, etc.), while living in corrective labour camps, for major offences. Tens of thousands of people have been reclaimed for society in this way; and the system has no practical bearing on Soviet economic planning, which depends entirely upon the informed initiative of free labour, as has been shown.

under semi-feudal social conditions, or as degraded colonial subjects: with an autocracy clogging political, cultural and economic progress at one end of society, and the most widespread illiteracy at the other end? If this has not created a "complex nature" for the economic system existing in the U.S.S.R., what could do so?

Moreover, in the U.S.S.R., too, decisions determining production are "dispersed among thousands of organisations and individuals" (as indeed they must be in any modern community, owing to the high degree of social division of labour which modern industry requires). Ample evidence has been given earlier in this book to show that the picture of Soviet planning as of some huge machine of regimented servants, obeying the pressure of a button in the Kremlin, is a myth.

What is true, of course, is that Soviet planning is based on the public ownership of land and all mineral wealth, of industry and transport, of agriculture, trade and the banking system. It has, as we have seen, many imperfections still. But it has succeeded in transforming backward agrarian Russia into an advanced industrial Socialist State: it has rescued a vast agricultural population from age-long poverty and ignorance: it has created an effective system of economic democracy in the factories: it has assured to women increasingly full economic and social equality with men, in deed as well as in law: it has ended class privilege in health and education: and it has raised tens of millions of former colonial subjects to full practical equality with the Russian people.

These results are no mean achievement for the space of thirty years. Perhaps it is reasonable to suggest that they would justify, even in Great Britain, a more close attention to the principles and methods of Soviet planning.

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